

Baumatic

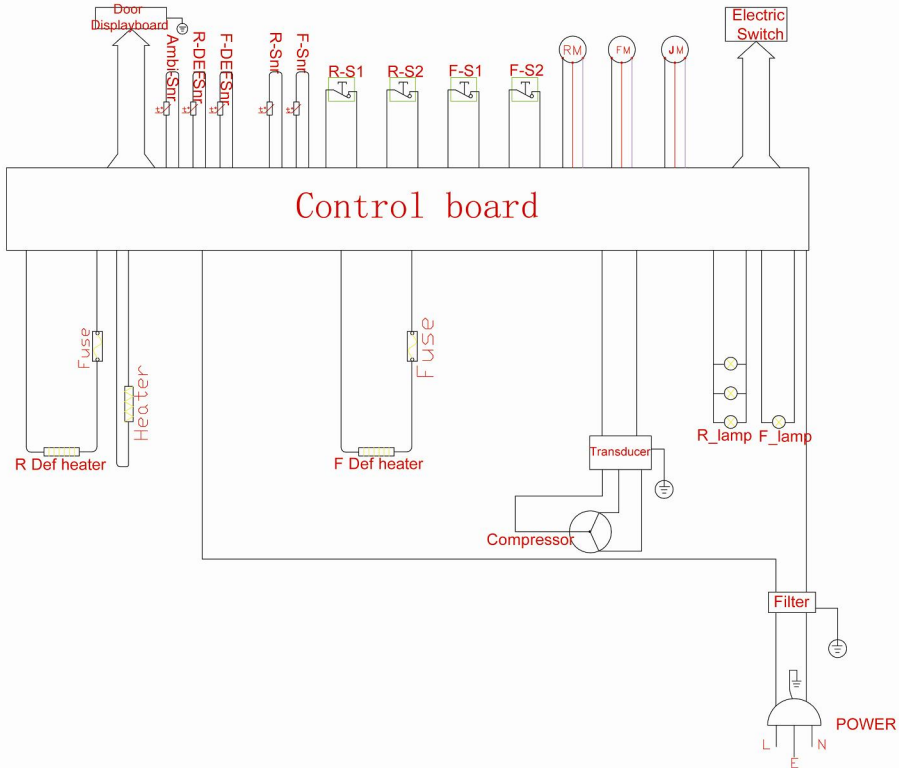
Spare parts list for Baumatic model B40DSS

Position	Prefix	Supplier Item code	MODEL NUMBER	Description UK
1	XMR	50290801000L	B40DSS	DISPLAY AND CONTROL PANEL ASSEMBLY
2	XMR	501157010139	B40DSS	DISPLAY TRIM
3	XMR	502301010030	B40DSS	DISPLAY and CONTROL PCB
4	XMR	501157010138	B40DSS	PCB BACK COVER
5	XMR	502908010022	B40DSS	HANDLE - REFRIGERATOR
6	XMR	5037001145PK	B40DSS	DOOR ASSEMBLY L/H
7	XMR	501255710001	B40DSS	FIXING BOLT FOR HANDLE
8	XMR	501157010115	B40DSS	GASKET - REFRIGERATOR DOOR
9	XMR	501257010002	B40DSS	VERTICAL IRON COVE
10	XMR	502413000042	B40DSS	MULLION HEATER
11	XMR	501604000052	B40DSS	TORSION SPRING SLEEVE
12	XMR	501157010068	B40DSS	VERTICAL IRON BOTTOM AXIS COVER
13	XMR	501157010116	B40DSS	VERTICAL IRON BOTTOM AXIS
14	XMR	502908000135	B40DSS	TORSION SPRING
15	XMR	501157010093	B40DSS	VERTICAL IRON UPPER AXIS
16	XMR	501157010067	B40DSS	VERTICAL IRON UPPER AXIS COVER
17	XMR	502202010008	B40DSS	VERTICAL IRON FOAM
18	XMR	501157010042	B40DSS	VERTICAL IRON SLIDE REINFORCE PART
19	XMR	502500100061	B40DSS	SCREW
20	XMR	501157010092	B40DSS	VERTICAL IRON PLASTIC PART
21	XMR	502500200067	B40DSS	SCREW
22	XMR	501157610002	B40DSS	DAIRY SHELF LID
23	XMR	501157010030	B40DSS	DAIRY SHELF L/H
24	XMR	501157610003	B40DSS	LARGE DOOR TRAY L/H
25	XMR	501157010031	B40DSS	SMALL DOOR TRAY L/H
26	XMR	503700113385	B40DSS	DOOR ASSEMBLY R/H
27	XMR	501157010066	B40DSS	DOOR CLOSE STOPPER R/H
28	XMR	501257010012	B40DSS	DOOR OPEN STOPPER R/H
29	XMR	501157010045	B40DSS	EGG RACK
30	XMR	501157010044	B40DSS	SMALL DOOR TRAY R/H
31	XMR	501157610001	B40DSS	LARGE DOOR TRAY R/H
32	XMR	501157010032	B40DSS	DAIRY SHELF R/H
33	XMR	502500300074	B40DSS	SCREW
34	XMR	501157010033	B40DSS	DOOR CLOSE STOPPER L/H
35	XMR	502501200010	B40DSS	SCREW ASSEMBLY
36	XMR	501257010011	B40DSS	DOOR OPEN STOPPER L/H
37	XMR	502999900062	B40DSS	MAGNET
38	XMR	501157010130	B40DSS	MAGNET BOX
39	XMR	502500200067	B40DSS	SCREW
40	XMR	502908010021	B40DSS	HANDLE - FREEZER
41	XMR	503700113000	B40DSS	FREEZER - UPPER DOOR ASSEMBLY
42	XMR	501157010117	B40DSS	FREEZER - UPPER DOOR GASKET

43	XMR	502500200067	B40DSS	SCREW
44	XMR	502500300074	B40DSS	SCREW
45	XMR	501257010005	B40DSS	FREEZER DRAWER R/H BRACKET
46	XMR	501157010046	B40DSS	ICE SPOON
47	XMR	501157610004	B40DSS	ICE MAKER HANDLE
48	XMR	501157010110	B40DSS	FREEZER UPPER DRAWER
49	XMR	501157010079	B40DSS	UPPER DRAWER PARTITION
50	XMR	501157010065	B40DSS	BOTTOM DRAWER PARTITION
51	XMR	501157010080	B40DSS	DRAWER BLOCK
52	XMR	501157010108	B40DSS	FREEZER BOTTOM DRAWER
53	XMR	501257010007	B40DSS	BOTTOM DRAWER REINFORCING BAR
54	XMR	501157010088	B40DSS	FREEZER DRAWER SYNCHRONOUS GEAR
55	XMR	501257010013	B40DSS	SYNCHRONOUS GEAR CONNECTING BAR
56	XMR	501257010029	B40DSS	SLIDE RAIL R/H
57	XMR	501157610007	B40DSS	ICE BOX
58	XMR	501257010030	B40DSS	SLIDE RAIL L/H
59	XMR	501157010010	B40DSS	FREEZER DOOR SWITCH BLOCK
60	XMR	501257010006	B40DSS	FREEZER DRAWER L/H BRACKET
61	XMR	501157010135	B40DSS	FREEZER - BOTTOM DOOR GASKET
62	XMR	503700113154	B40DSS	FREEZER BOTTOM DOOR ASSEMBLY
63	XMR	501157610006	B40DSS	VEGETABLE DRAWER
64	XMR	501157610010	B40DSS	SALAD CRISPER - L/H
65	XMR	50360201027C	B40DSS	GLASS SHELF - L/H
66	XMR	50360201027B	B40DSS	GLASS SHELF - R/H
67	XMR	501157010039	B40DSS	CRISPER HUMIDITY CONTROL PANEL
68	XMR	501157010040	B40DSS	HUMIDITY CONTROL PANEL CLAMP
69	XMR	500757010011	B40DSS	CRISPER COVER REINFORCING BAR
70	XMR	501157610011	B40DSS	SMALL (MIDDLE) DRAWER
71+74	XMR	501157010131	B40DSS	CRISPER COVER
72	XMR	501157010072	B40DSS	SHELF INSERT
73	XMR	50360201027A	B40DSS	GLASS FOLDING SHELF - R/H
75	XMR	501157610009	B40DSS	SALAD CRISPER - R/H
76	XMR	501157010118	B40DSS	FRIDGE DUCT COVER DECORATION
77	XMR	501157010027	B40DSS	FRIDGE SCREW COVER
78	XMR	502500100050	B40DSS	SCREW
79	XMR	501257010004	B40DSS	MIDDLE BRACKET FOR SHELVES
80	XMR	502403000436	B40DSS	FRIDGE SENSOR HARNESS
81	XMR	501157010107	B40DSS	FRIDGE DUCT COVER
82	XMR	502101000268	B40DSS	SPONGE TAPE
83	XMR	502201010016	B40DSS	FRIDGE DUCT INSULATING FOAM
84	XMR	502201010013	B40DSS	FRIDGE DUCT INSULATING FOAM LEFT COVER
85	XMR	501554210001	B40DSS	EVAPORATOR ASSEMBLY - REFRIGERATOR
86	XMR	501157010008	B40DSS	CRISPER COVER L/H BRACKET
87	XMR	502799900041	B40DSS	CRISPER CUSHION
88	XMR	501157010009	B40DSS	CRISPER COVER R/H BRACKET
89	XMR	501157010026	B40DSS	CRISPER WHEEL
90	XMR	501157010127	B40DSS	VERTICAL IRON GUIDE BASE
91	XMR	501157010012	B40DSS	TOP LAMP COVER - REFRIGERATOR
92	XMR	502301000076	B40DSS	LED LAMP PCB - REFRIGERATOR
93	XMR	502409000105	B40DSS	LAMP SOCKET
94	XMR	501157010062	B40DSS	HINGE COVER L/H
95	XMR	502905010207	B40DSS	TOP LEFT HINGE

96	XMR	501257010001	B40DSS	SIDE BRACKET FOR SHELVES
97	XMR	502905000054	B40DSS	MIDDLE HINGE L/H
98	XMR	502408000110	B40DSS	DOOR SWITCH
99	XMR	501157010063	B40DSS	HINGE COVER R/H
100	XMR	502500200067	B40DSS	SCREW
101	XMR	502500300075	B40DSS	SCREW
102	XMR	502905010208	B40DSS	TOP RIGHT HINGE
103	XMR	503705010696	B40DSS	CABINET ASSEMBLY
104	XMR	502410000100	B40DSS	SIDE LED LAMP PCB - REFRIGERATOR
105	XMR	501157010013	B40DSS	SIDE LAMP COVER - REFRIGERATOR
106	XMR	501157010028	B40DSS	DRAWER BRACKET R/H
107	XMR	501157010029	B40DSS	DRAWER BRACKET L/H
108	XMR	502099911573	B40DSS	CONTROL STICKER
109	XMR	501257010033	B40DSS	DRAWER SLIDE R/H
110	XMR	501757010002	B40DSS	DRAWER SLIDE L/H
111	XMR	502500200067	B40DSS	SCREW
112	XMR	502904010078	B40DSS	EVAPORATOR FRONT COVER
113	XMR	502201010014	B40DSS	DUCT FOAM COVER - REFRIGERATOR
114	XMR	501157010018	B40DSS	FAN MOTOR BRACKET - REFRIGERATOR
115	XMR	502500200067	B40DSS	SCREW
116	XMR	502201010015	B40DSS	FRIDGE DUCT INSULATING FOAM RIGHT COVER
117	XMR	501157010048	B40DSS	UV FRESH LAMP COVER
118	XMR	502500200067	B40DSS	SCREW
119	XMR	501157010112	B40DSS	AIR CHANNEL
120	XMR	502500200067	B40DSS	SCREW
121	XMR	501157010005	B40DSS	VARIABLE TEMP. COMPARTMENT THROTTLE MASK
122	XMR	502201010012	B40DSS	AIR CHANNEL INSULATING FOAM
123	XMR	502201000143	B40DSS	THROTTLE FOAM
124	XMR	502101000273	B40DSS	THROTTLE WATERPROOF SPONGE
125	XMR	501257010015	B40DSS	DECORATIVE PLINTH
126	XMR	500757010001	B40DSS	SEPARATED PLATE
127	XMR	501157010089	B40DSS	FAN BLADES - FREEZER
128	XMR	501157010034	B40DSS	BRACKET
129	XMR	502500200067	B40DSS	SCREW
130	XMR	500501200191	B40DSS	ALUMINIUM FOIL TAPE
131	XMR	502404000148	B40DSS	FAN MOTOR - FREEZER
132	XMR	500501200192	B40DSS	ALUMINIUM FOIL TAPE
133	XMR	501554210002	B40DSS	EVAPORATOR ASSEMBLY - FREEZER
134	XMR	501157010074	B40DSS	FREEZER SLIDE BRACKET L/H
135	XMR	502500200067	B40DSS	SCREW
136	XMR	501157010011	B40DSS	LAMP COVER - FREEZER
137	XMR	502410000099	B40DSS	LED LAMP PCB - FREEZER
138	XMR	502409000106	B40DSS	LAMP SOCKET - FREEZER
139	XMR	501157010078	B40DSS	FREEZER SLIDE BRACKET R/H
140	XMR	501157010105	B40DSS	ADJUSTABLE FOOT
141	XMR	502500100058	B40DSS	SCREW
142	XMR	501157010057	B40DSS	SHAFT SLEEVE
143	XMR	502905000055	B40DSS	MIDDLE HINGE R/H
144	XMR	502500200034	B40DSS	SCREW
145	XMR	50230101003Q	B40DSS	MAIN CONTROL PCB
146	XMR	500757010009	B40DSS	PCB COVER
147	XMR	501757010003	B40DSS	CONDESNSER ASSEMBLY

148	XMR	500757010007	B40DSS	COMPRESSOR CHAMBER COVER
149	XMR	502500200067	B40DSS	SCREW
150	XMR	501157010006	B40DSS	DRAIN TUBE
151	XMR	502799900045	B40DSS	DRAIN TUBE CONNECTOR
152	XMR	501441110003	B40DSS	COMPRESSOR R600a
153	XMR	502799900038	B40DSS	PAD
154	XMR	502404000147	B40DSS	COMPRESSOR FAN MOTOR
155	XMR	502799900039	B40DSS	PAD
156	XMR	501157010025	B40DSS	MOTOR FIXED COVER
157	XMR	502799900040	B40DSS	PAD
158	XMR	501157010103	B40DSS	COOLING FAN MOTOR BRACKET
159	XMR	501160010001	B40DSS	FAN BLADES
160	XMR	501602000037	B40DSS	DRYER FILTER
161	XMR	501157010102	B40DSS	REAR WHEEL
162	XMR	500755810005	B40DSS	WHEEL AXLE
163	XMR	502501200010	B40DSS	SCREW ASSEMBLY
164	XMR	500757010013	B40DSS	COMPRESSOR MOUNTING PANEL
165	XMR	50240101001K	B40DSS	POWER CABLE



BAUMATIC SERVICE MANUAL

Model: B40DSS

**Stainless Steel 4 door 570 Litre
Frost Free Fridge/Freezer**



Date of Issue: 09.05.2013

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Specifications

Model	B40DSS
Model Code	520054210003
Compressor	VEMB11C
Climate Class	ST
Protection Against Electric Shock	I
Rated Voltage/Frequency	AC220-240V/50Hz
Rated Power(W)	140W
Rated Defrost Power(W)	370W
Lamp Rated Power(W)	3.3W
Rated Current(A)	0.8A
Foaming Agent	Cyclopentane
Energy Consumption(kwh/24h)	1.11kW·h/24h
Energy Efficiency Class	A+
Total Gross Volume(L)	570L
Gross Freezer Volume(L)	145L
Total Storage Volume(L)	542L
Freezer Storage Volume(L)	120L
Refrigerator Storage Volume(L)	422L
Refrigerant, Amount	R600a,75g
Freezing Capacity(kg/24h)	10
temperature rise value	900min
Net Weight(kg)	135
Gross Weight(kg)	146
Noise	45dB(A)
Product Dimensions(mm) (width)	911x728.5x1775(without handle)
Packing Dimensions(mm)(WxDxH1)	985x780x1870

Function Schedule

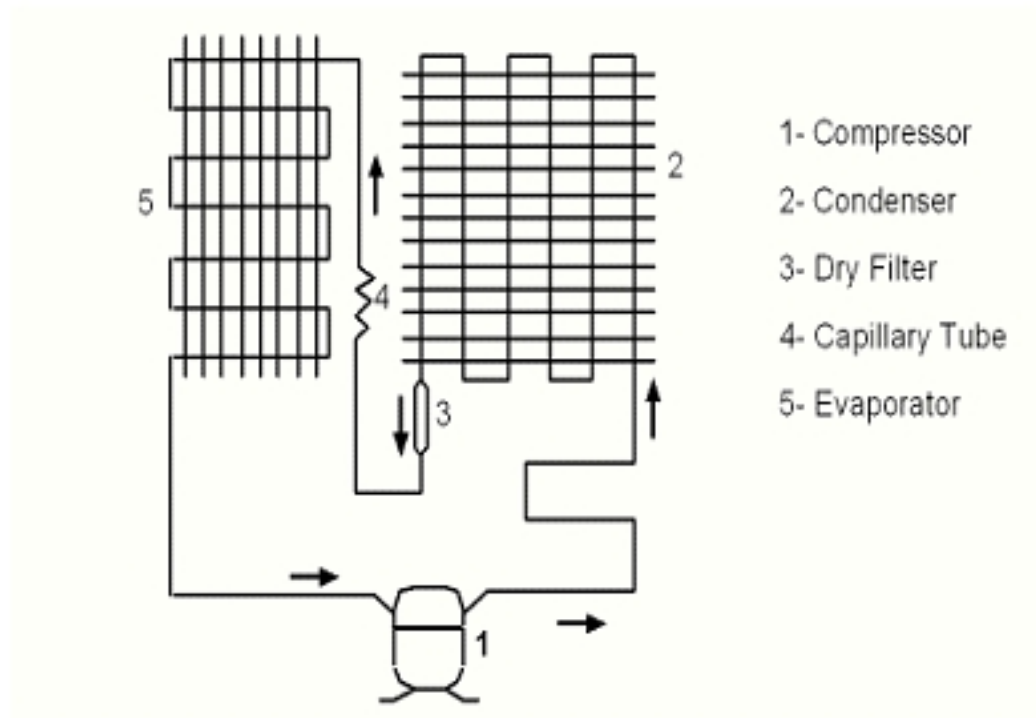
Function Schedule

- **Energy efficiency**
- **Micro foam technology**
- **Low noise operation**
- **Thick insulation for energy efficiency**
- **Electronic control**
- **Ice-making function**
- **Vocation mode function**
- **Quick-freeze mode function**
- **Quick-cooling mode function**

System Flow Chart

System Flow Chart

1 Schematic diagram of System Flow Chart



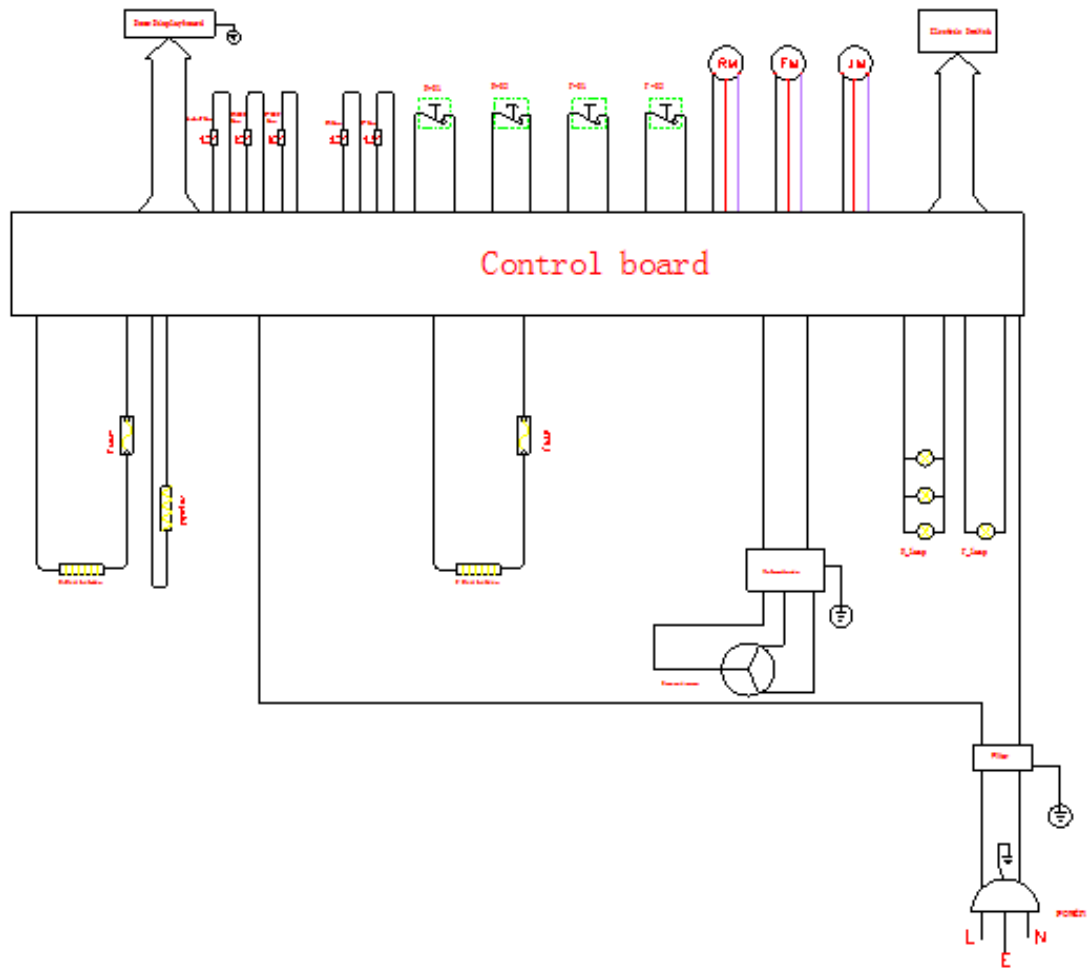
2 Brief Description of System Flow Chart

Flows in the sequence: 1 → 2 → 3 → 4 → 5 → 1

Circuit Diagram

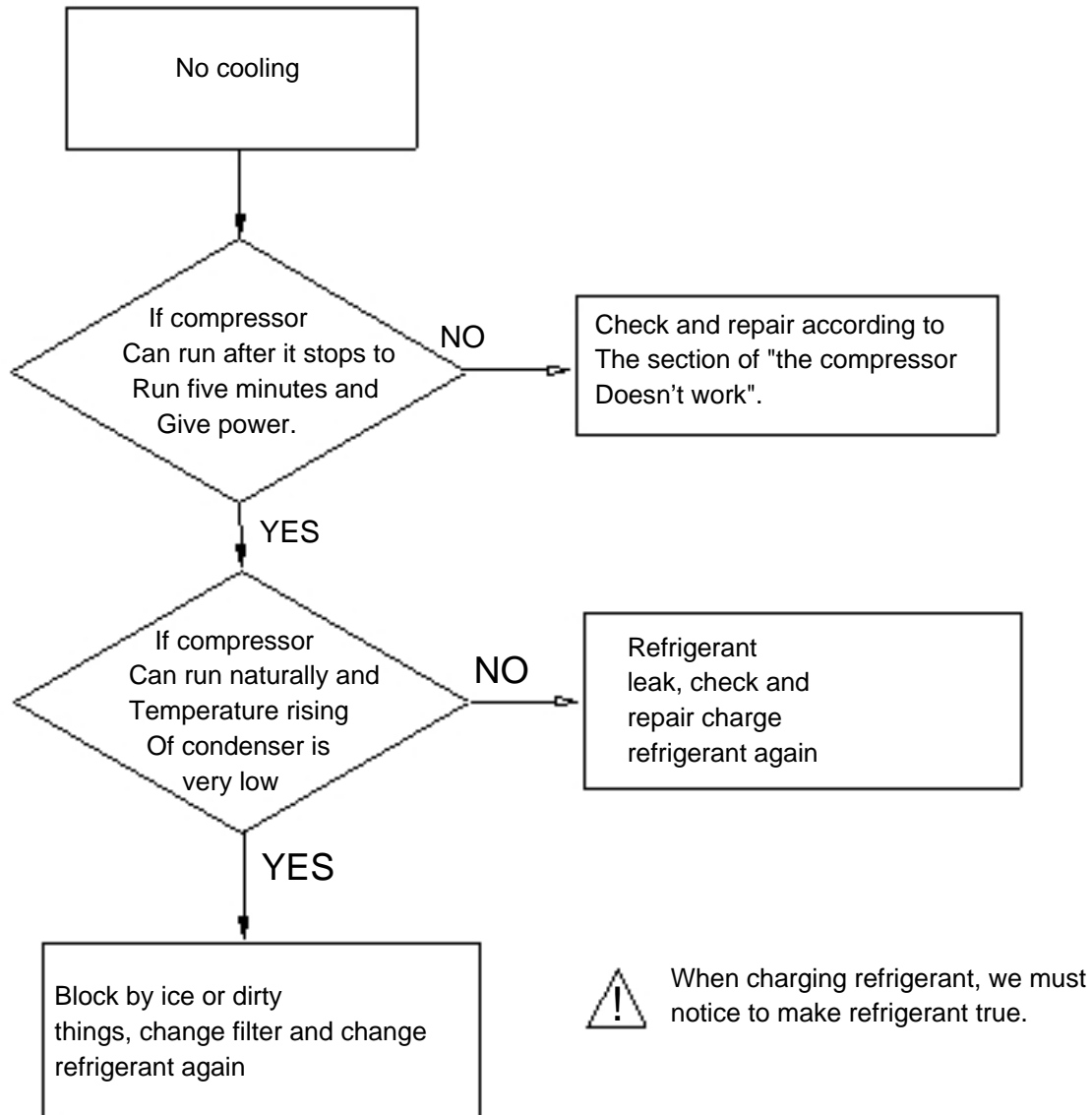
Circuit Diagram

1 Schematic Circuit Diagram

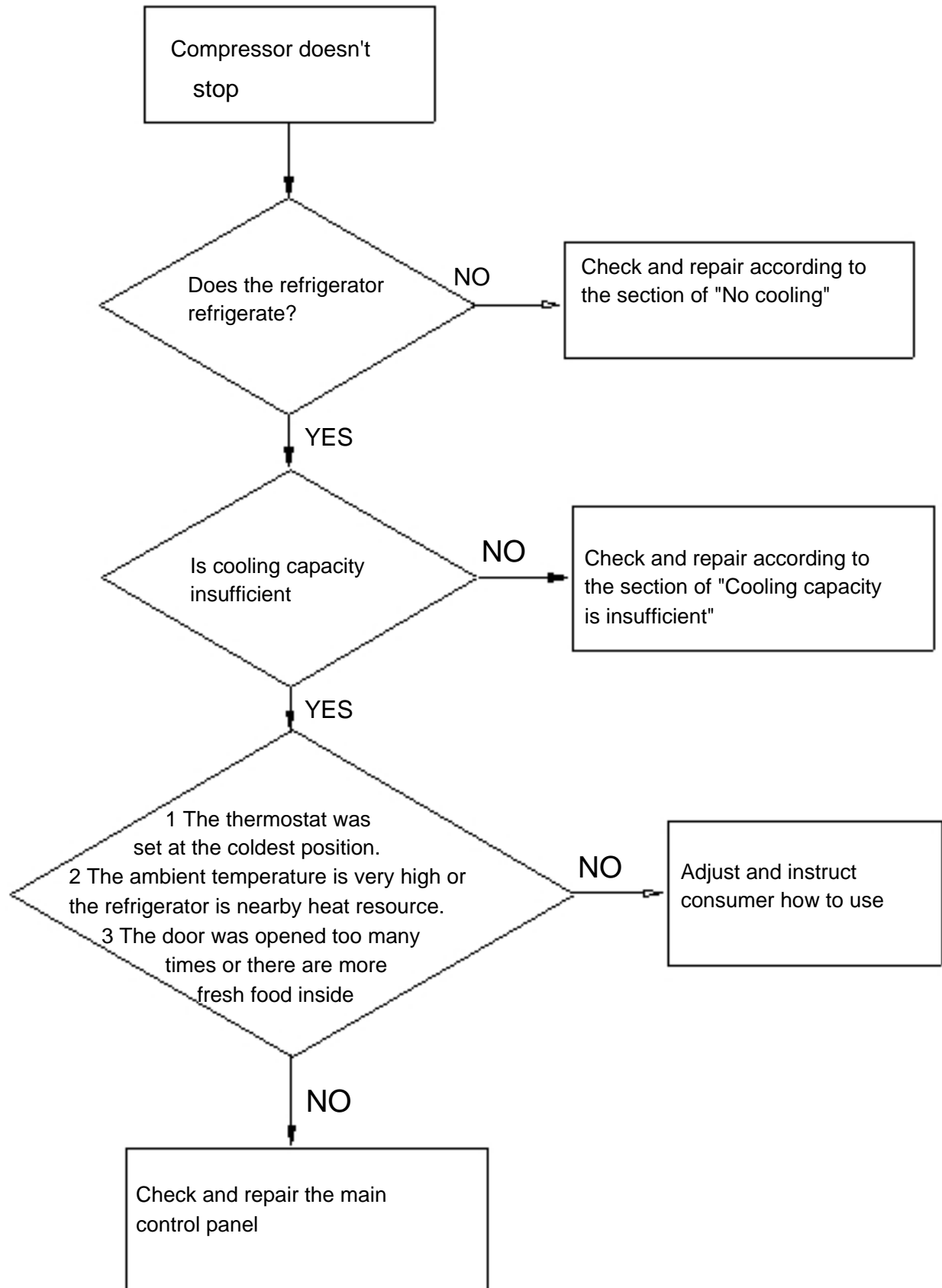


Maintenance Service and Trouble Shooting

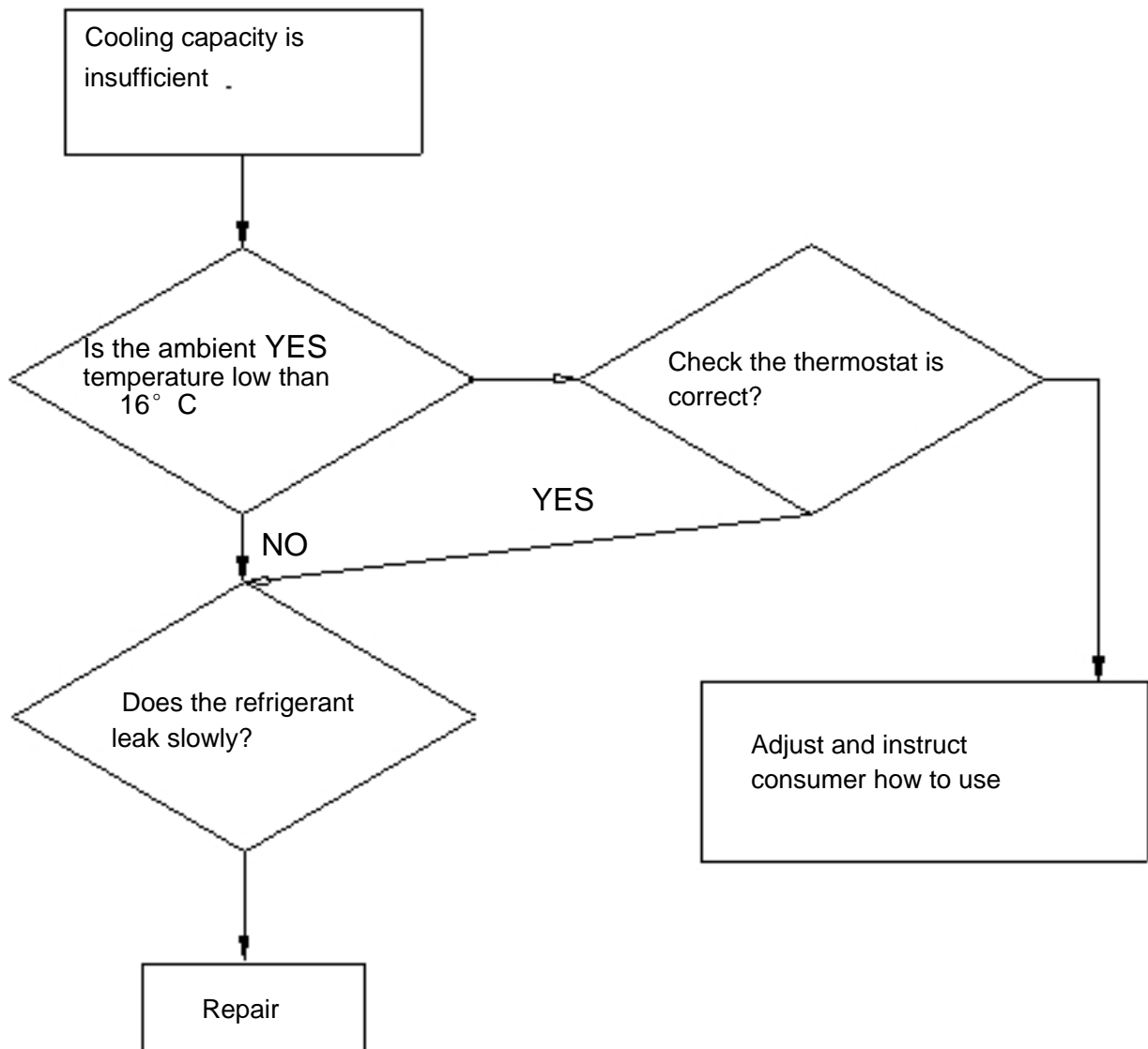
1. No cooling



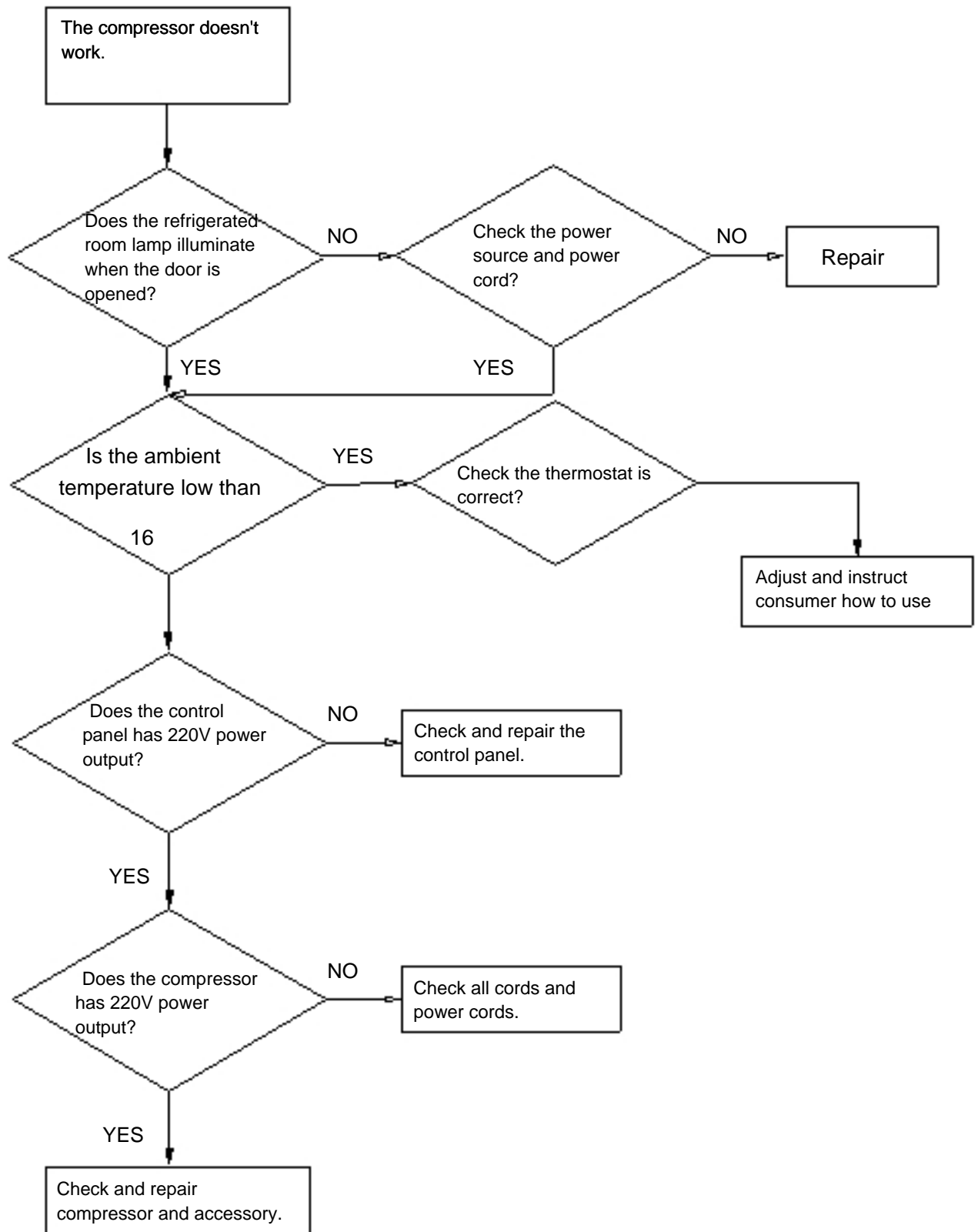
2 The compressor doesn't stop



3 Cooling capacity is insufficient



4 The compressor doesn't work



Maintenance Service and Trouble Shooting

5 Normal Phenomena—Not Troubles for Refrigerators

In a domestic refrigerator, there is not only a complicated electric control system, but also a refrigerating system that is difficult to discern whether it is in a good working condition. Both the systems are related and affect each other. If a certain part of a refrigerator works abnormally .Its Refrigerating efficiency will decrease, operation properties will become Unstable or even it cannot be used normally for those serious cases.

Refrigerators are generally of larger volume, once troubles appear, to Send them to a service department is really a tough thing, if such is the case, the user will always be in suspense, sometimes ,normal phenomena will be erroneously regarded as troubles .Therefore ,before we deal with the topics of frequently occurring troubles of refrigerators and their remedies ,we should firstly give a brief account of some normal phenomena which are not troubles .In case any one of such phenomena occurs ,there is no need to worry about it ,and the user can use it at total ease.

1).When the compressor of a refrigerator has just stopped running ,a rumbling sound can be heard from inside its evaporator .This is a sound caused by the flowing of refrigerant in the evaporator tubing .Because the pressure difference is still greater after the compressor has just stopped running ,the refrigerant will flow for a certain time , therefore ,this sound is a normal phenomenon.

2).A click sound can often be heard from the refrigerator .This is a normal sound produced by the pull-in or release of the armature of a current deadweight starts relay when starting the compressor .The compressor motor will produce a slight and uniform sound while it is running .This sound is not easy to be heard in the daytime ,but of course it can be heard distinctly at night.

3).The compressor consists of an electric motor and a compressing apparatus .During its normal operation ,the motor's stator core and windings will rise to a temperature in the range of $100^{\circ}\text{C}\sim 110^{\circ}\text{C}$,and the temperature of the piston and cylinder of the compressing mechanism can also reach as above 100°C due to the heat produced when compressing refrigerant .Most of the heat radiates to the air through the compressor casing ,therefore ,its casing is generally at a temperature between $85^{\circ}\text{C}\sim 90^{\circ}\text{C}$

it is very hot ,particularly in summer when the ambient temperature is higher .All these are normal phenomena .

4).For the direct cooling refrigerator ,a kind of irregular crack sound can be often heard when the compressor is running for a certain period of time or has just stopped its running .This sound is caused by the stress relief due to expansion and contraction when temperature changes ,and will not affect the normal application of refrigerator .

Maintenance Service and Trouble Shooting

6 Common Troubles in Refrigerators and Their Remedies

Causes for troubles occurring in refrigerators are closely related to the quality of components and workmanship in assembling by manufacturers as whether refrigerators are properly used and maintained .The parameters generally used to express the working conditions of a refrigerator include the temperature inside the refrigerator, operation rate, electric power consumption, noise level, and other functional indexes .If any one of these parameters is beyond its permissible range, this indicates that there is a fault or trouble in the refrigerator.

During the whole service life of a refrigerator , the probability of troubles occurring within a union time is called its failure rate .Making a comparison between the control circuit system of a refrigerator and its refrigerating system ,we can find that the failure rate of the former is higher ,and that of the thermostat is the highest . In troubleshooting , the first thing you must do is to determine where the trouble comes from --- the control system or the refrigerating system .There is general no trouble indicating instrument mounted on the domestic refrigerator, locations and natures of troubles should be determined according to their respective features ,therefore ,experience in servicing is very important to troubleshooting. Service technicians with rich experience can correctly locate them and take reasonable remedy measures based on their comprehensive analysis of trouble characteristics as well as operating conditions for various kinds of refrigerators.

Three Essentials for Checkup

1) Look

- a) Check the tubing of refrigerating system for cracks and various Welding points for leaks; if leakage occurs, an oil stain can be seen definitely.
- b) Check the suction and exhaust pressure values (high pressure and low pressure) of compressor to see whether they are normal.
- c) Check the conditions of frost attached to its evaporator and gas return tube .It is abnormal if frost has formed on part of the evaporator or there is no frost attached to it .
- d) Pay attention to the speed of temperature drop inside freezer compartment .It is abnormal if the speed of temperature drop is obviously slower than the corresponding normal speed .
- e) Check the environment to see whether it is suitable for placing a refrigerator.
- f) Check refrigerator door seal ,case ,table surface and heat insulation layer.
- g) Look at the main control board to ascertain if various indication states are normal.

2) Listen

- a) Listen to the noises produced when the compressor is running

Maintenance Service and Trouble Shooting

Hums from a fully enclosed aggregate unit is the sound caused by overload indicating that the motor cannot be started normally ,meanwhile ,a clattering sound can be heard from inside the start relay ,which is produced because the start contacts cannot be released normally .A whistling sound is caused by the high pressure gas flowing out of the crack of the pressure tube inside the compressor ,and clucks are the sound of striking after the suspended spring inside the compressor has broken .

During the normal operation of compressor, a slight and uniform hum sound due to undulation of electric current can be heard generally ,this is a normal phenomenon .However ,if it sounds like "tong ,tong ...",i.e., an impact sound inside the compressor ,this means that a large quantity of wet vapour of refrigerant or refrigerating oil has come into the compressor cylinder ;if it sounds like "dang ,dang...", a striking sound of metal parts inside the compressor ,this means that some moving parts have loosened (note to differentiate this sound from those formed during starting or stopping the compressor).

b) Listen to the sound caused by the flowing of gas in the evaporator

Open the refrigerator door while the compressor is in operation, incline your ear and listen attentively the gas flow sound inside the evaporator .If it sounds like gentle whistling accompanied by a sound similar to water flowing ,this is the sound produced by the normal circulation of refrigerant within the evaporator .In case only the gas flowing sound can be heard and there is no water flowing sound ,this indicates that the refrigerant has already percolated .If neither the flowing sound nor the gas sounds from the evaporator can be heard ,this means that the filter or capillary has been clogged .

3)Touch and Feel

a) Feel the compressor when running ,its temperature should be generally less than 90° C in the normal state (it may exceed 90° C in case of running for a longer period of time).

b) After the compressor has operated normally for 5~10 minutes , touch and feel the condenser ,the temperature of its upper part should be higher than that of its lower part (or its right part is hotter than its left part ,depending on the type of condenser coil),this indicates that the refrigerant is circulating . If the condenser is not hot ,this means the leakage of refrigerant .In case the condenser radiates heat for only several minutes and then cools down ,this means that the filter and capillary have been clogged .As for the forced air cooling condenser ,hot air will be blown out of it ; this means that the system is out of order .

c) Feel the filter's temperature .During the normal operation of refrigerating system ,the temperature on the filter's surface should be a little higher than the ambient temperature; if you touch it with your hand, you will have a sense of slight heat. In case dew condensation appears due to the fact that its temperature is obviously lower than the

ambient temperature ,this means that most meshes of its screen has been clogged ,resulting in an obstructed flowing of refrigerant ,thus causing a drop in temperature due to throttling .

d) Feel the temperature of exhaust gas from the refrigerating system .the exhaust gas should be very hot and this is the normal working state .For those refrigerator with enclosed type of compressor refrigerating system, no frost or dew drop will form on the gas suction tube ,otherwise ,there is something wrong in the system (Frosting and dew condensation may appear for a very short time period when just starting the machine ,this is a normal phenomenon).

Because a refrigerator is a combination of several components ,they are related and have influence on each other In case an abnormal phenomenon has been found through the above-mentioned checkups ,you need not to make a hasty conclusion based on only one abnormal phenomenon .It is advisable to find out two or more abnormal phenomenon ,or conduct troubleshooting comprehensively with the aid of instruments or other ways ,because several kinds of troubles may share a common abnormal phenomenon ,and two or more abnormal phenomena may occur simultaneously due to a certain trouble .With this method ,you can reject some suspicious troubles and finally make a correct judgment .

7 Analysis of Troubles and Troubleshooting

A. Poor Refrigerating Effect

The so-called "poor refrigerating effect " refers to the fact that the refrigerator can operate and refrigerator normally ,but the temperature in the refrigerator cannot drop to the prescribed value under the stipulated working conditions .In view of there are many causes for this phenomenon ,we are going to discuss and analyze it in the following 7 aspects :

1) Leakage of refrigerant

Analysis of Trouble

The leakage of refrigerant in the system will result in an insufficient refrigerating capacity ,the resulting phenomena are its lower gas suction pressure and exhaust pressure as well as higher exhaust gas temperature. The exhaust tube feels rather hot ,and a continuous gas flowing sound louder than usual can be heard at the outlet of the capillary ,and no frost or a smaller quantity of loose frost appears on the evaporator .After shut down ,the balance pressure in the system is usually lower than the saturation pressure corresponding to the same ambient temperature .

Remedy

In case there is leakage of refrigerant from the system ,do not hurry to recharge it with refrigerant ,manage to find out leak points immediately, and make a note of from where it leaks ---welding points and parts. After having them repaired, recharge refrigerant.

Maintenance Service and Trouble Shooting

There are so many joints and sealed surfaces in a refrigerator, accordingly, quite a lot of potential leak points do exist in the system. In troubleshooting, pay attention to those parts that are liable to leak, check main connection points for oil seepage and tubing for cracks. If there is no severe leak point, charge the system with nitrogen and detect leak points with the commonly adopted method, repair them, evacuate, charge the system with refrigerant, and then turn on the refrigerator to make a test run.

2) Too much refrigerant charged into the system

Analysis of Trouble

a) In case the amount of refrigerant charged into the system exceeds its nominal capacity, the superfluous refrigerant will of course take some space of the evaporator, thus reducing its heat-dissipation area and hence the refrigerating efficiency of the system. The abnormal phenomena caused by this reason are as follows: the gas suction and exhaust pressures are generally higher than their respective normal values, the temperature of its condenser is higher and the electric current of the compressor rises, loose frost forms on the evaporator, the refrigerator temperature drops slowly, and frost appears on the gas return tube.

b) In case excessive refrigerant has been charged, the liquid refrigerant that cannot evaporates in the evaporator will return to the compressor, and thus a phenomenon of "liquid striking" will occur. The liquid refrigerant evaporates and effervesces as soon as it flows into the refrigerating oil at the bottom of compressor. If the condition is severe, foams will fill all over inside the compressor housing and be sucked by the piston, causing damage to the components of compressor.

Remedy

According to the operating procedures, it is mandatory to turn the machine off, and several minutes later, open the refrigerant charging tube and let the refrigerant escape from it, replace the dry filter, recharge refrigerant after evacuating, and then seal the charging port.

3) There is air left in the refrigerating system

Analysis of Trouble

Residual air in the refrigerating system will reduce its refrigerating efficiency. The prominent phenomena are the increase in its gas suction and exhaust pressures (however, the gas exhaust pressure will not exceed its rated value), obvious increase in temperature in the segment from the compressor outlet to the condenser inlet. Because there is air in the system, both the gas exhaust pressure and temperature will rise, and moreover, the gas flowing sound is intermittent and obviously louder.

Remedy

After shut down for several minutes, open the tubing, evacuate it and then recharge the system with refrigerant.

4) Low efficiency of compressor

Analysis of Trouble

Low efficiency of a refrigerating compressor refers to the actual reduction of gas discharge capacity ,and hence the corresponding reduction of refrigerating capacity ,under the condition that the refrigerant in the system is unchanged .This phenomenon occurs mostly when the compressor has been used for quite a long time ,its moving parts have worn to a considerable degree ,fit clearance between various parts have increased and sealing property of its gas valve has deteriorated ,resulting in an decrease in its actual gas discharge capacity .

Methods of Judgment

Measure the high and low pressures with pressure gauges to see whether they are normal .If an abnormal sound comes from the compressor or the temperature of its casing is too high ,Cut the discharge port open and operate the compressor ,feel it if there is pressure at the discharge port with your finger (For a normal compressor ,its discharge port is difficult to be blocked with your finger if you just apply a little effort).

5) Too thick frost layer formed on evaporator

Analysis of Trouble

If a direct cooling refrigerator is to be used for a prolonged period of time ,be sure to defrost its evaporator regularly ;if you fail to do so ,the frost layer on the evaporator tubing will become thicker and thicker .Heat conduction will be severely affected when the whole tubing is wrapped with a transparent ice layer ,and finally the temperature in the refrigerator cannot drop down to the prescribed range .

Remedy

Turn the refrigerator off , and make preparations for defrosting ,open the refrigerator door to let the air come in ,or use a fan to speed up air flowing so as to shorten the time needed for defrosting .Never strike the frost layer with any iron tools or wood stick in order to avoid damage to the evaporator tubing .

6) Refrigerating oil left in evaporator tubing

Analysis of Trouble

During the process of refrigerating cycles , a little refrigerating oil may remain in the evaporator tubing ,and after a longer time of operation ,if there is considerable refrigerating oil left in the evaporator ,the heat conduction effect will be severely affected ,thus causing a poor refrigerating effect .

Remedy

It is quite difficult to determine whether this trouble is caused by the refrigerating oil left in the evaporator tubing ,because this kind of phenomenon and other several trouble are tends to be confused .Generally speaking ,you can make a judgment based on the frost formed on the evaporator .If the frost does not cover the evaporator , and moreover ,it is loosely formed ,you can make a judgment that the deterioration of

refrigerating effect is due to the accumulation of refrigerating oil left in the evaporator tubing in case no other troubles have been found . To clear off refrigerating oil left in the evaporator ,dismantle the evaporator ,purge it thoroughly and then dry it .In case it is difficult to dismantle it ,charge refrigerant from the evaporator inlet to wash it several times ,then purge and dry it with nitrogen .

7) Flowing obstructed in refrigerating system

Analysis of Trouble

Because the refrigerating system was originally not purged thoroughly ,some of the filter screen meshes have been clogged by dirt accumulated in the filter after using it for a certain time of period ,thus resulting in a decrease in flow rate ,and hence a poorer refrigerating effect .

The abnormal phenomena caused by this kind of slight clogging in the system are as follows: the gas discharge pressure is lower ,the temperature of discharged gas drops down ,the position clogged has a temperature lower than that in normal conditions ,and for a severe clogging ,even dew condensation as frosting may appear .

Remedy

Purge the tubing , and after replacing the dry filter with a new one or clearing it thoroughly ,recharge the system with refrigerant and seal the charging port .

B. No Refrigerating

The phenomenon that the compressor runs normally , but no frost (or only a little frost) appears on the evaporator ,and the refrigerator temperature does not drop down is called "no refrigerating". There are many causes for this trouble and it is relatively complicated , too . In servicing ,special attention to finding direct causes for this phenomenon .Three main potential causes for this trouble are analyzed below :

1) All refrigerant in the system has leaked out

Analysis of Trouble

Leak points in the refrigerating system have not been found and repaired timely ,thus resulting in the total escape of refrigerant .There are two kinds of leakage :i) **slow leakage** for instance ,when we want to use a refrigerator that has been put out of quite a long time ,we find the leakage of refrigerant ,or in the course of its operation ,we have found that the refrigerator is gradually becoming not so cold and finally no refrigerating can be achieved ; ii) **fast leakage** in that case ,all the refrigerant will escape swiftly due to abrupt rupture of system tubing .

Symptoms of total leakage of refrigerant are mainly as follows : the compressor can be started easily (if there is no damage to the compressor parts) and its operating current becomes low ,its gas suction pressure is high and discharge pressure is lower ,the gas discharge tube feels rather cold ,no sound of gas eruption from the liquid in the evaporator can be

heard ,and no will gush out of the process tube if you cut it open after shutdown .

Remedy

Check the whole machine , particularly those locations which are liable to leak .After leak points have been found ,repair them or replace them with new parts according to specific circumstances ,then evacuate the system and finally charge refrigerant.

2) Refrigerating system has been clogged

a) Clogged with Ice

Analysis of Trouble

The dryness treatment for the major parts in the refrigerating system has been performed improperly, the effect of air purging for the whole system is not good ,or the water content in the refrigerant is out of standard ,all these will cause the expansion valve to be clogged with ice .The symptom for this trouble are as follows :the refrigerator sometimes can refrigerate and sometimes cannot :the refrigerator compartment works normally at the beginning ,but after working for a certain period of time ,frosting begins at the clogged position ,evaporation temperature reaches below 0°C , water will accumulate at the narrow part of the capillary and clog it gradually ,then frost begins to melt at the evaporator ,no gas flowing sound can be heard ,and the gas suction pressure assumes a state of vacuum .Note that these phenomena will appear intermittently ; sometimes ,the refrigerator works well ,and sometimes not well .In order to determine whether it is clogged with ice ,heat the suspicious points with hot water to make ice melt ,and after a while if a gas flowing sound resulting from an abrupt gush is heard and the gas suction pressure rises as well ,it can be confirmed that the trouble is caused by ice clogging .

Remedy

If there is too much moisture in the refrigerating system, it is advisable to release the refrigerant, purge the tubing with nitrogen, and then charge the system with the filtered refrigerant. However, the commonly adopted method is to connect a filter with moisture absorbers (such as silica-gel, anhydrous calcium chloride) to the refrigerating system so as to filter out the moisture from the system, then replace the filter, evacuate it again and finally charge the system with refrigerant.

b) Clogged with dirt in capillary

Analysis of Trouble

The capillary inlet is a place where coarse-grained dirt or refrigerant oil in the system will tend to settle down and clog it. In case considerable dirt accumulates there, the whole filter screen may be blocked totally, making the refrigerant unable to go through. Clogging with dirt exhibits the same symptoms as that with ice, namely, higher gas suction pressure, lower temperature of discharged gas, and no gas flowing sound from the evaporator. The difference between the both is as follows: if the clogging is

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caused by dirt , tapping the suspicious clogged point (generally in the capillary or the connection joint of the filter) may cause the refrigerant to flow through partially, resulting in some corresponding change, whereas in that case if you heat it with a hot towel, no reaction will happen, no flowing sound can be heard, moreover, there is no periodic change. After rejecting the possibility of ice clogging, it can be generally considered as the clogging due to dirt .

Remedy

Dismantle the system, remove the dry filter from it, purge the tubing with nitrogen, install a new filter, then evacuate it and finally charge it with refrigerant.

C) Clogging in filter

Analysis of Trouble

Total clogging of a filter is rarely to occur. This trouble is mostly caused by the paste-like matter formed from the substances filled into the system or other dust after the refrigerator has been used for a longer time, or by the dirt accumulated gradually inside the filter. Sometimes, tapping the filter may cause a passage for flowing, Touching it with your hand, you will feel that it is cooler compared with its temperature in the normal state.

Remedy

The same as described in the capillary clogging with dirt.

3) Troubles of Compressor

a) Breakage of gas suction and discharge valve blocks

Analysis of Trouble

The compressor works by means of the opening and closing of gas suction valve and discharge valve to suck and discharge the refrigerant. If the valve block is broken, the refrigerant can not be discharged, and hence no refrigerating can be achieved.

Method for making judgement

It is quite difficult to differentiate this trouble from others because they often have similar symptoms. In repairing, firstly, hear attentively if there is some abnormal sound coming from the compressor (sometimes , the broken pieces of valve block may strike against the cylinder), and feel the compressor casing with your hand to ascertain whether it is too hot, this is also helpful to the troubleshooting; secondly, measure the pressures at the high and low pressure ports of the compressor with pressure gauges, if the gas suction valve block is broken, the suction pressure gauge pointer will swing violently and the suction pressure is very high, whereas when the gas discharge valve block is broken , the discharge pressure gauge pointer will swing drastically and the discharge pressure is very high. In the both cases, stop the compressor at once, and if technique is available, open the cylinder cover and check up the valve block, repair it, or replace it with a new one,

C. Sudden stop of Compressor during Its Running

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The cause of sudden stop of a compressor during its running is mostly that the gas suction pressure and/or discharge pressure exceed their respective prescribed ranges, thus making a pressure-operated protective relay shut off the power to the compressor and stop it. In the following we discuss mainly the reasons for causing excessively high gas discharge pressure and low suction pressure.

1) Stoppage due to excessively high gas discharge pressure

A) Too much refrigerant charged into the system

Analysis of Trouble

The phenomenon, such as loose frosting and poor refrigerating effect, may occur if excessive refrigerant has been charged into the system. Superfluous refrigerant will occupy a certain space of the evaporator, thus reduce its heat dissipating area, and the phenomenon of "liquid striking" may occur, too. Meanwhile, dew or frost condensation may occur on the gas return tube, and the gas discharge pressure will obviously rise, when it reaches the threshold value, the protective relay will actuate and shut off the power supply to the compressor.

Remedy

Open the tubing, re-evacuate and then charge the system with a proper quantity of refrigerant.

b) Air left in the system

Analysis of Trouble

The residual air in the system will circulate together with the refrigerant in the system. The major symptoms caused by this residual air is higher gas discharge pressure, higher discharged gas temperature (the gas discharge tubing is considerably hot when you feel it with your hand), and poorer refrigerating effect. Furthermore, the gas discharge pressure will exceed its normal value when the compressor has run for a period not too long, thus making the protective relay actuate and bring to a stoppage.

Remedy

Check up how the air has been left in the refrigerating system. Generally, there are two possibilities: one is that the air has been sucked into the system when repairing due to carelessness, or it has not been purged out totally when evacuating the system; the other is that there are leak points at the low pressure end of the refrigerating system. Leak points appear mostly in those low temperature parts or assemblies, because the evaporation temperature is lower for such low temperature devices, especially at the low pressure end, it is easier for the air goes into the system. Once it has been ascertained that air does exist in the system, you have to open the tubing, re-evacuate it and then charge it with refrigerant.

2) Stoppage due to electric troubles

a) Thermostat is out of control

Analysis of Trouble

In case the thermostat does not work in its good order or its

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temperature sensor has not been installed properly, frequent stoppage is also likely to occur.

Remedy

Try to adjust the temperature sensor's position until the compressor can be started and stopped normally. If this cannot be achieved, and the stoppage still occurs repeatedly, it is most likely that the mechanical parts or contacts are out of order, disassemble the thermostat, make a thorough checkup and repair it.

b) Overload of electric motor

Analysis of Trouble

Probably, too many things have been put into the refrigerator, and hence the thermal load exceeds its refrigerating capacity ; or in case the power supply voltage drops considerably, the current flowing through the motor will increase drastically making the thermal protector actuate and the fuse blown , and hence the motor stops running. If the motor is still running continuously in such a case , its windings will be burned out .

Remedy

Reduce the thermal load, pay attention to the variation in voltage of the power supply.

c) Abnormal thermal protection

Analysis of Trouble

The compressor current is within its normal range, but the thermal protector actuates repeatedly.

Remedy

Replace the thermal protector with a new one.

3) Sudden stoppage due to other causes

Normal Stoppage

Start and stop of the compressor is generally controlled by a thermostat . When the temperature in the refrigerator reaches its desired value, the thermostat will shut down the compressor automatically. Never take this normal operation as a trouble, care should be taken to differentiate it from other real troubles in servicing.

D. Compressor won 't start

In case the compressor cannot be started, you must find out the origins of this trouble through checkup step by step, because probably there are many causes, including those electrical and mechanical.

1) Inspect the power supply to see whether it is connected to the compressor circuit.

Analysis of Trouble

In case the compressor cannot be started, this will generally exhibit in the power supply circuit, for instance, power failure, poor contact of switch, and blown fuse. Make a comprehensive analysis of these phenomena, fine out its real cause and take correct measures to remove this trouble.

Remedy

a) Check the input power circuit to see whether where is voltage of the power supply, namely, the circuit which is connected to the knife switch. This can be determined with an avometer or a test pencil. If a blown fuse is found, ascertain and remove its cause, then replace it with a new one of the same specifications.

b) Check the compressor accessories, including its thermal protector and relay. In case the thermal protector is damaged, the compressor cannot be powered on. If the relay is out of order, the motor will not run and hum sound can be heard from it after the compressor is turned on, in that case, shut it down immediately, otherwise, the motor windings will be burned out in case this condition lasts longer.

c) Check the relay contacts and plugs to see if they are perfect and work reliably. Poor contact may cause the motor not running or humming.

2) Check the circuit voltage to see whether it is normal.

Analysis of trouble

If the circuit voltage is obviously lower than its rated value, it will be difficult to start the motor, and a hum sound can be heard from it.

Remedy

Measure the voltage with a voltmeter, if it is really too low, give directions to the user for buying a stabilizer so as to step up the voltage, thus normal operation can be achieved.

3) Check the thermal relay to see whether its contacts are closed.

Analysis of Trouble

The contacts of thermal relay sometimes may be open due to the leakage of temperature sensing agent from the temperature sensor.

Remedy

Remove the relay cover to check up its contacts, if they are open, this means that the original setting is not properly set or temperature sensing agent has leaked out of the temperature sensor. Try to turn the adjusting stem of this value in the direction of the lower temperature graduation, then check the contacts to see whether they are closed. If they are still not closed, dismantle the temperature sensing disc and then immerse it into warm water to see whether the contacts actuate, if not, it can be preliminarily determine that temperature sensing agent has leaked out, and it must be replaced with a new thermostat.

4) Motor troubles and other electric faults

a) Motor windings have been burned or short-circuited between turns

Analysis of Trouble

When motor windings have been burned or short-circuited between turns, the fuse will be blown repeatedly, and the blowout occurs particularly at the instant when you close the knife switch.

Remedy

Check the terminals and the outer casing to see whether they are short-circuited, and measure the resistance of each phase with an

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avometer. If short circuit occurs or the resistance of a certain phase is low, this means that short circuit does exist in the windings and/or between turns, and insulation layers have been burned or deteriorated. A megameter can be used in this inspection, too. If the insulation resistance is lower than $2\text{ M}\Omega$, this means that the insulation layer is already breakdown. If the motor has been burned, repair it or replaced it with a new one.

b) Fault of control relay

Analysis of Trouble

Overheat, burnout or wear of control relay contacts may occur generally. All these will cause poor contact in electricity.

Remedy

Dismantle it to repair, or replace it with a new one.

c) Poor electric contactor in thermostat

Analysis of Trouble

Burnout of contactor and leakage of temperature sensing agent may occur generally.

Remedy

Replace the old with a new one.

d) Check the terminals for loose connection and electric circuits for other abnormal phenomena.

5) Mechanical faults of compressor

a) Seizing of shaft

This phenomenon is caused mostly by poor lubrication, such as insufficient quantity of lubricant, clogging in the lubricant oil line, or intermittent lubricant oil supply. Dirt and other impurities in the lubricant oil will increase its viscosity and cause the shaft to be seized. Copper plating may also result in seizing of shaft.

b) Seizing of piston

This is caused by too small fit clearance between the piston and cylinder or expansion due to heat.

Judgement of seizing shaft and piston: After the refrigerator has been powered on, the compressor will not start and run, but a slight hum sound can be heard, and several seconds later, thermal protective relay will actuate and make the contacts open; this process will occur repeatedly, but the compressor cannot be started.

E. Compressor won't stop

Sometimes, the compressor will run continuously (for several hours or run without end). If the food placed in the refrigerator is not too much, there may be the following two situations: i) the refrigerator very low, this means that the control system is probably out of order; ii) the control system works normally, and there are troubles in the refrigerating system or other parts.

1) Temperature is set improperly

a) The temperature control knob is set to the "coldest" position. This

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position is to be used for fast freezing or continuous running, its temperature for power off is too low, therefore, the compressor won't stop and the temperature in the refrigerator becomes lower and lower .

b) Inspection method: check the temperature control knob to see whether it is set in the position "coldest".

2) Thermostat is malfunctioning and makes the compressor running continuously

Analysis of Trouble

When the thermostat doesn't work normally, it will make the compressor run continuously, and hence very low temperature will be achieved in the refrigerator. The fault is generally due to the fact that the contacts of the thermostat cannot be released.

Remedy

Dismantle the thermostat and make a through checkup, if it is totally out of functioning, replace it with a new one.

3) evaporation temperature is too high in refrigerating system, resulting in lower refrigerating capacity and hence continuous running of compressor

Analysis of Trouble

Leakage of refrigerant and clogging in a refrigerating system will directly affect its refrigerating capacity. Due to the reduction in its refrigerating capacity, the refrigerator temperature cannot reach its rated value, the thermostat won't work, thus the compressor runs continuously. When the evaporation temperature in the system is too high, the temperature sensing agent in the temperature sensor is also hotter, therefore, the thermostat is unable to cut off the power supply to the compressor and stop it.

Remedy

If it has been found that the refrigerant in the system is insufficient in quantity, recharge it with refrigerant. In case clogging occurs, disassemble the part where it is blocked. If the evaporation temperature is too high, settle this problem with an appropriate quantity of refrigerant.

4) No stoppage of compressor due to damaged heat-insulation layer inside case body and/or door seal

Analysis of Trouble

When the heat-insulation layer inside the case body deteriorates or the door seal is not closely touches the door frame, the temperature in the refrigerator will rise and makes the compressor running continuously.

Remedy

Check the heat-insulation layer for its damaged parts, repair it to improve its heat-insulation property. If the door has deformed or the door seal is not tightly sealed against the case body, repair them, respectively.

5) Too much food is placed in the refrigerator, or is placed too densely, resulting in poor ventilation or poor conditions for temperature sensing, and hence no stoppage of the compressor.

6) Too high ambient temperature, poorer ventilation and heat

dissipation make the compressor running without stop.

F. Electric leakage of refrigerator

1) Slight electric leakage

Electric insulation has deteriorated due to being affected with damp, thus resulting in slight electric leakage.

2) Serious electric leakage

Refrigerator case has become live due to faults occurred in some electric devices or the erroneous wiring in installing power cord plug or outlet by the user. This is very dangerous.

3) Electric leakage test

a) Slight electric leakage

A tingle sense will be experienced as soon as you touch the metal parts of the refrigerator with your hand .When you test them with a test pencil ,its neon lamp will come on .In that case ,the first thing you need to do is to determine whether the grounding is perfect .If the grounding is no problem ,turn off the refrigerator immediately ,then check the insulation of electric circuits with an avometer .

b) Serious electric leakage

Never touch the case body of the refrigerator ,its door handle or other metal parts with your hand .Test the refrigerator with a test pencil ,it will light up intensively ;measure the resistance between the power cord plug and the case body with an avometer ,the reading will be zero (0Ω); in the worst case ,the fuse will be blown .Check the 3-prong outlet to see whether the live wire and the null line are inversely connected ,this makes the ground protection lead-out from the power cord plug being connected to the live wire .Another possibility is that the live wire and null line of the outdoor power supply circuit have been inversely connected accordingly ,this makes the null line become a live wire .

G .Stronger vibration and loader noise

1) Refrigerator placed improperly

a) Uneven ground

Uneven ground will cause there frigerator to be placed unsteadily ,causing stronger vibration and noise during its operation .

b) Leveling screws not properly adjusted

If the leveling screws on refrigerator legs have not been adjusted properly ,vibration and noise will still occur even if the refrigerator has been placed on a level ground .

2) Abnormal noise from compressor

Three suspended spring inside the compressor case are out of balance ,and strike against the case ,moreover ,the wear of compressor parts may cause noise sometimes .

3) Resonance of tubing and loosening of parts

Improper and compact laying of tubes or the loosening of parts may cause vibration and noise .

Maintenance Service and Troubleshooting

4) Inspection method

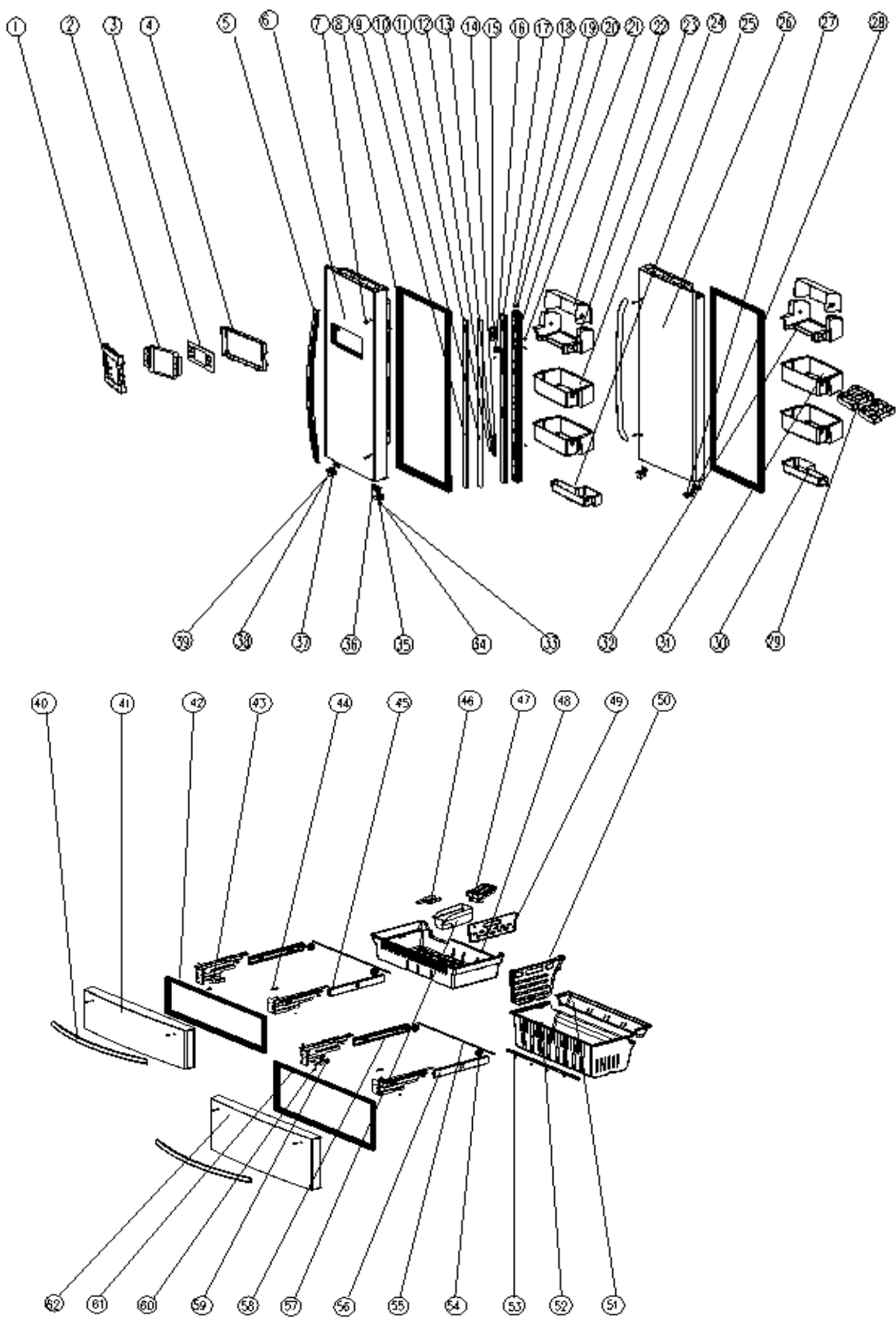
To find the sources of noise, press the vibration spot with your hand while the refrigerator is in operation and listen attentively whether the vibration becomes weak or vanishes. If the refrigerator has not been levelly placed, put a level meter on its top table and adjust the leveling screws on its legs. In case noise occurs from the compressor, strike different locations on the side surface of its case using a rubber hammer or hand hammer with a wood block in-between so as to determine whether the suspended springs are out of balance or being seized.

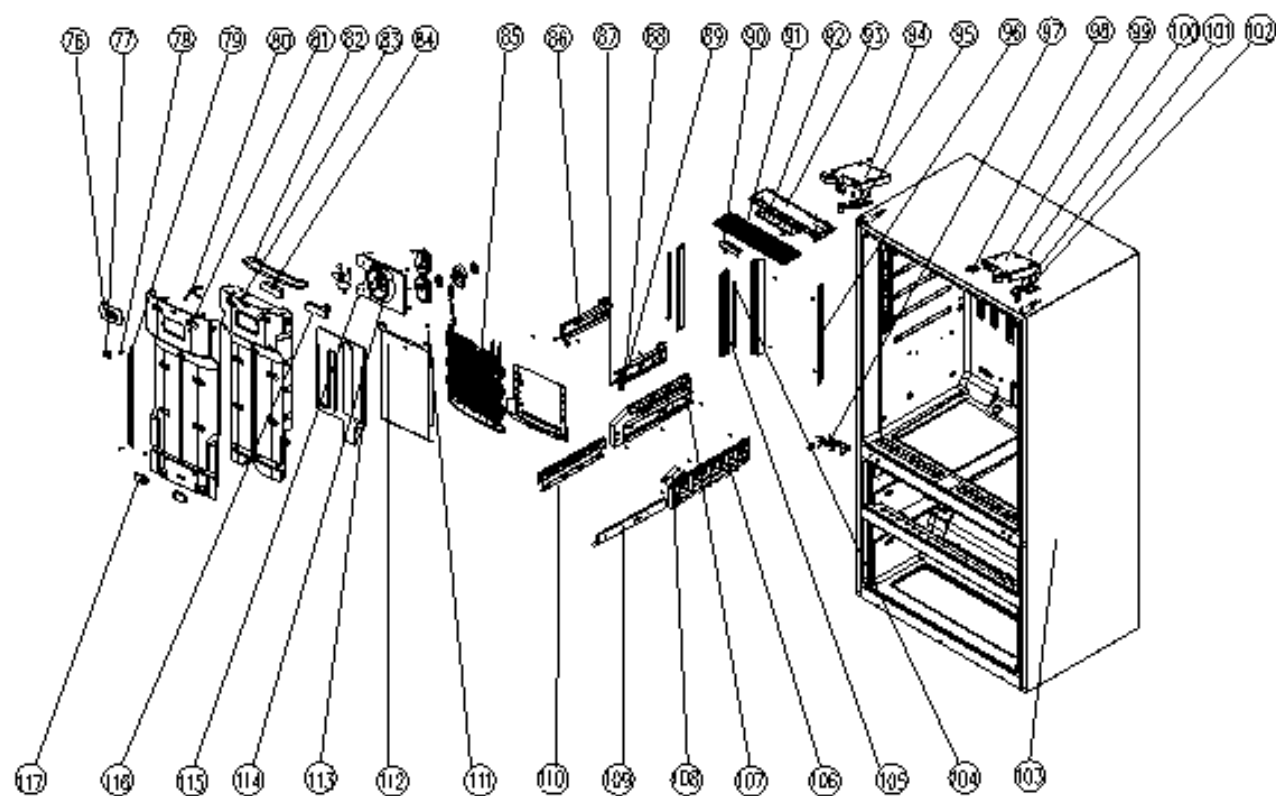
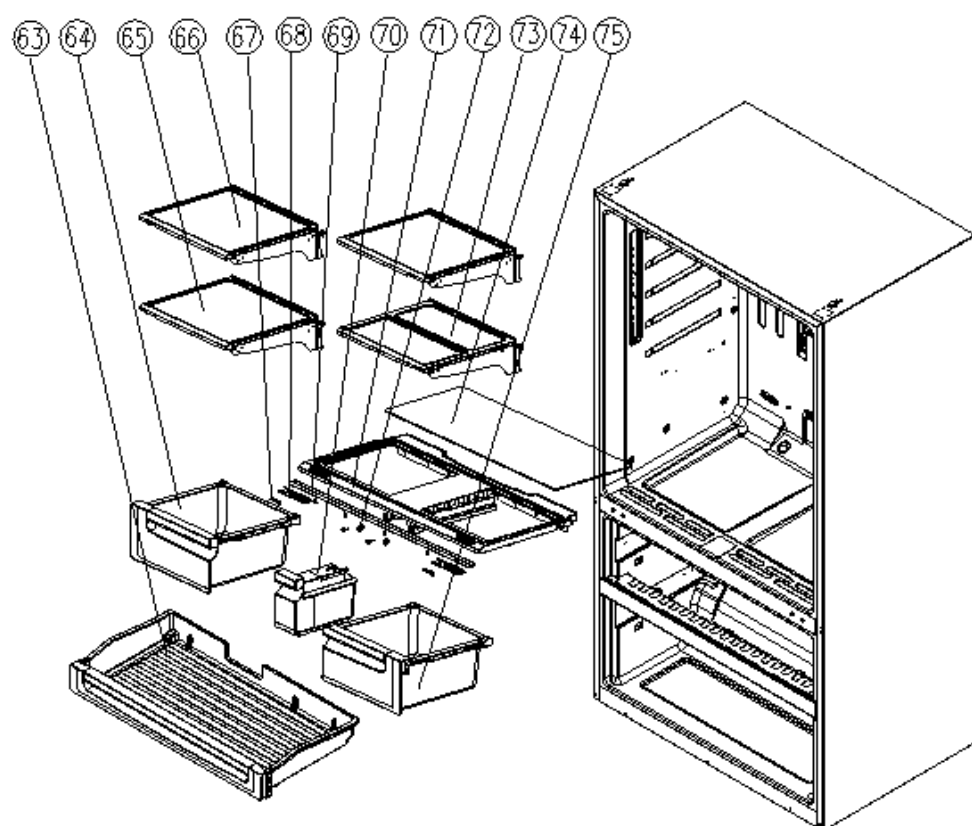
H. Defect Code of Display Panel

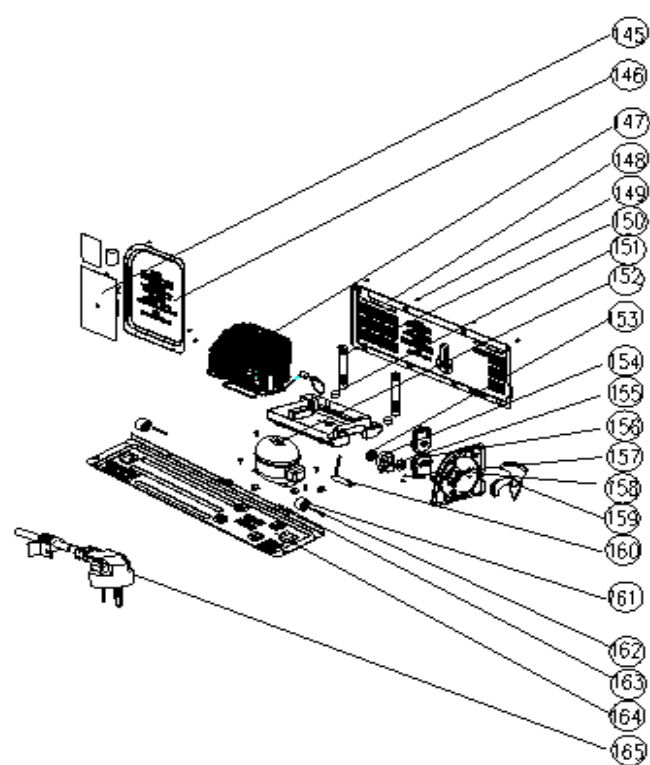
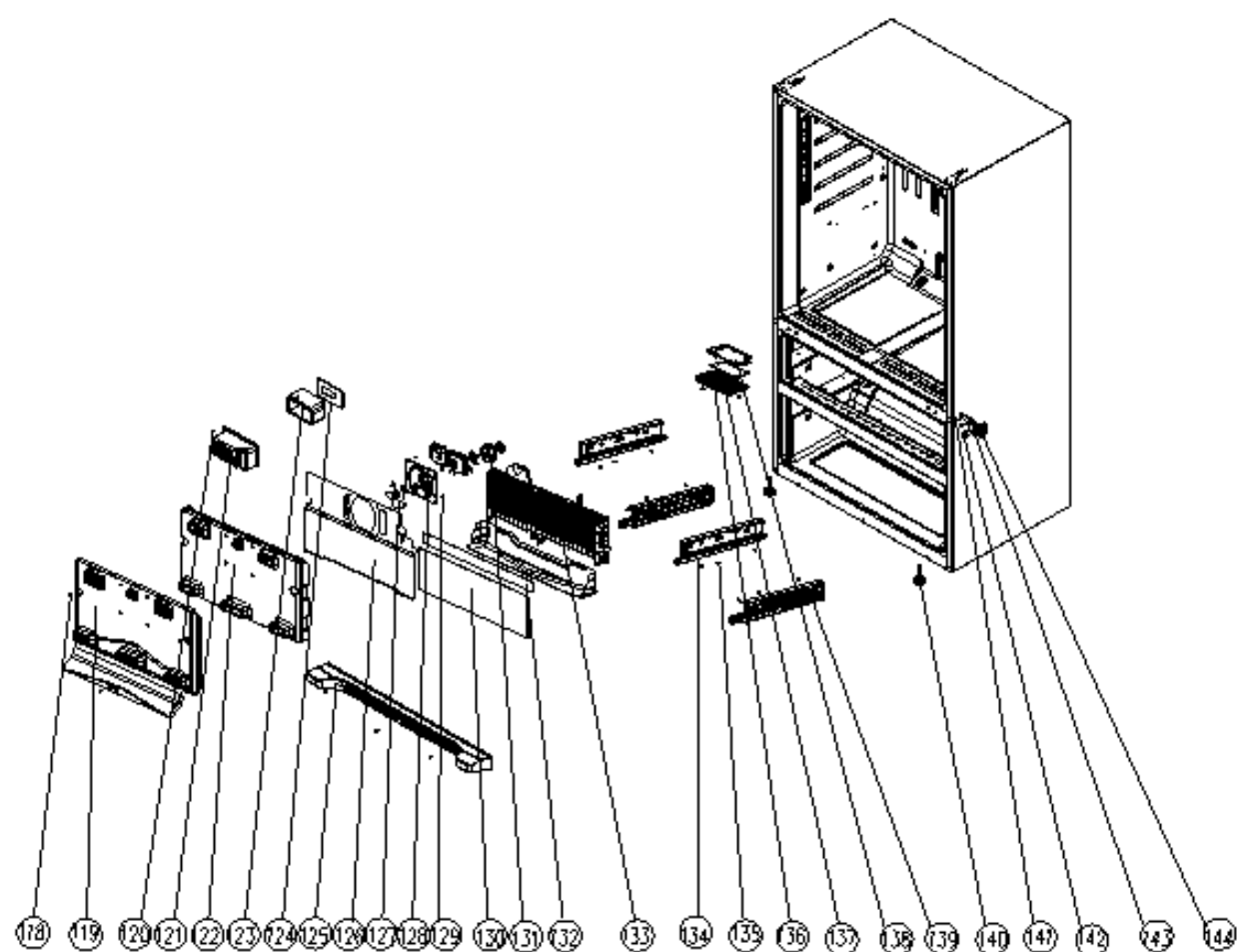


Error description		Defect code of Display panel
(R)refrigerator sensor		E1
(F)freezer sensor		E2
(M)freezer sensor M room		E3
(D)defrost sensor	R-EVA	E4
	F-EVA	E5
Defect of communication status		E6
(RT)ambient temperature sensor		E7
(F) High Temperature Alarm of freezer compartment		E9
Ice machine initialization failure		E0

List of Parts







Item	Part No.	Description	Quantity
1	50290801000L	display and control panel assembly	1
2	501157010139	display control decoration	1
3	502301010030	display control PCB	1
4	501157010138	PCB back cover	1
5	502908010022	R door handle	2
6	5037001145PK	R door assembly L	1
7	501255710001	handle fixed bolt	8
8	501157010115	R door seal	2
9	501257010002	vertical iron cove	1
10	502413000042	compensation heater	1
11	501604000052	torsion spring sleeve	2
12	501157010068	vertical iron bottom axis cover	1
13	501157010116	vertical iron bottom axis	1
14	502908000135	torsion spring	2
15	501157010093	vertical iron upper axis	1
16	501157010067	vertical iron upper axis cover	1
17	502202010008	vertical iron foam	1
18	501157010042	vertical iron slide reinforce part	1
19	502500100061	screw	2
20	501157010092	vertical iron plastic part	1
21	502500200067	screw	2
22	501157610002	flip	2
23	501157010030	left dairy	1
24	501157610003	large tray	2
25	501157010031	small tray	1
26	503700113385	R door assembly R	1
27	501157010066	right door close stopper	1
28	501257010012	right door open stopper	1
29	501157010045	egg tray	2
30	501157010044	small tray	1
31	501157610001	large tray	2
32	501157010032	right dairy	1
33	502500300074	screw	1
34	501157010033	left door close stopper	1
35	502501200010	screw assembly	2
36	501257010011	left door open stopper	1
37	502999900062	magnet	4
38	501157010130	magnet box	1
39	502500200067	screw	1

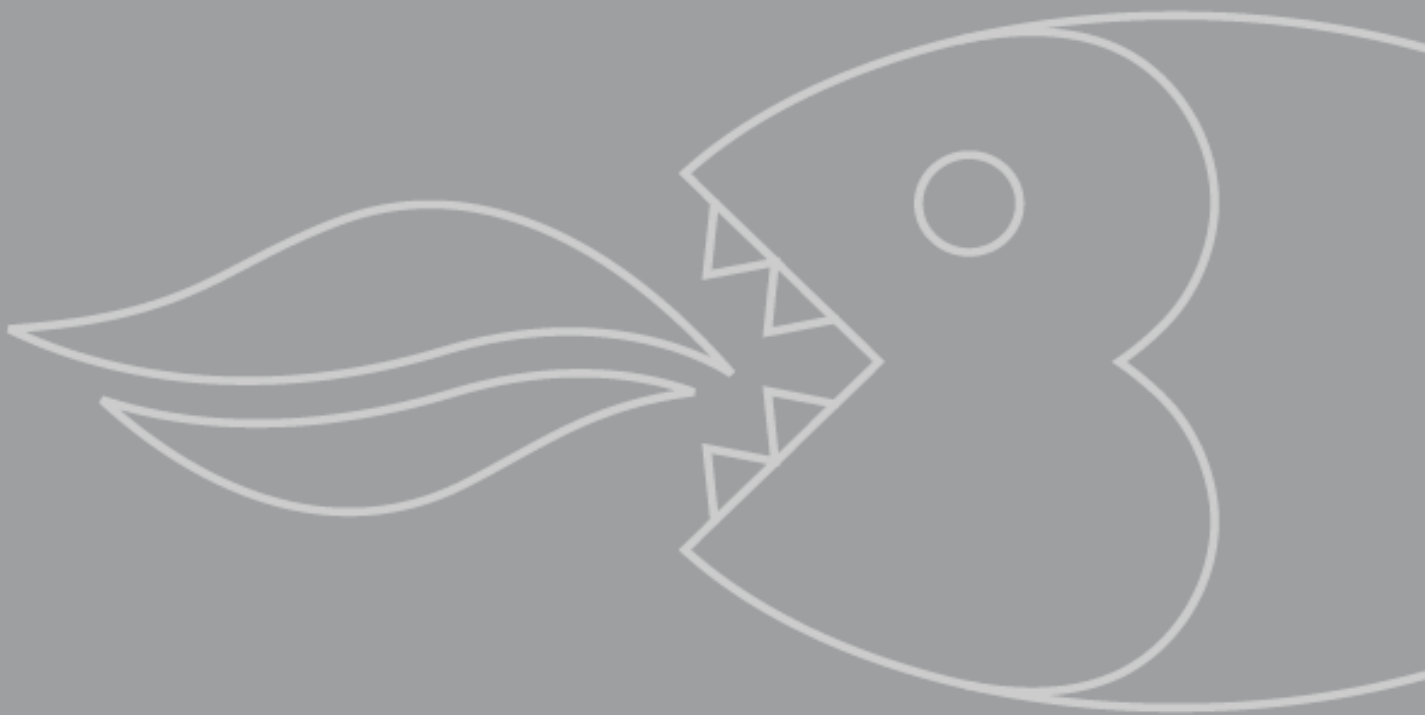
40	502908010021	F door handle	2
41	503700113000	F door assembly	1
42	501157010117	F upper door seal assembly	1
43	502500200067	screw	3
44	502500300074	screw	2
45	501257010005	F drawer right bracket	1
46	501157010046	ice spoon	1
47	501157610004	handle IM	1
48	501157010110	F upper drawer	1
49	501157010079	up drawer partition	1
50	501157010065	bottom drawer partition	1
51	501157010080	drawer block	1
52	501157010108	F bottom drawer	1
53	501257010007	bottom drawer reinforce iron	1
54	501157010088	F drawer synchronous gear	2
55	501257010013	F synchronous gear connect pole	1
56	501257010029	slide rail	1
57	501157610007	ice box	1
58	501257010030	slide rail	1
59	501157010010	F door switch block	1
60	501257010006	F drawer left bracket	1
61	501157010135	F bottom door seal assembly	1
62	503700113154	F door assembly	1
63	501157610006	VTC drawer	1
64	501157610010	left crisper assembly	1
65	50360201027C	left leakproof glass shelf	2
66	50360201027B	right leakproof glass shelf	1
67	501157010039	crisper humidity controlling panel	1
68	501157010040	humidity controlling panel clamp	1
69	500757010011	crisper cover reinforce iron	2
70	501157610011	Small drawer	1
71	501157010131	crisper cover	1
72	501157010072	shelf insert	1
73	50360201027B	leakproof fold cantilever shelf assembly	1
74	501157010131	vegetable basket glass shelf assemb	1
75	501157610009	right crisper assembly	1
76	501157010118	R duct cover decoration	1
77	501157010027	R screw cover	1
78	502500100050	screw	1
79	501257010004	cantilever shelf middle bracket	1
80	502403000436	R sensor harness	1
81	501157010107	R duct cover	1
82	502101000268	sponge tape	1

83	502201010016	R duct foam	1
84	502201010013	R duct foam left cove	1
85	501554210001	R finned tube evaporator assembly	1
86	501157010008	crisper shelf left bracket	1
87	502799900041	crisper cushion	4
88	501157010009	crisper shelf right bracket	1
89	501157010026	crisper wheel	2
90	501157010127	vertical iron guide base	1
91	501157010012	R upper lamp cover	1
92	502301000076	R upper LED PCB	1
93	502409000105	R upper lamp socket	1
94	501157010062	hinge cover	1
95	502905010207	top hinge	1
96	501257010001	cantilever shelf side bracket	1
97	502905000054	mid hinge R	1
98	502408000110	R lamp cover	2
99	501157010063	hinge cover	1
100	502500200067	screw	5
101	502500300075	screw	2
102	502905010208	top hinge	1
103	503705010696	cabinet assembly	1
104	502410000100	R side LED PCB	2
105	501157010013	R side lamp cover	2
106	501157010028	drawer right bracket	1
107	501157010029	drawer left bracket	1
108	502099911573	control sticker	1
109	501257010033	drawer slide	1
110	501757010002	drawer slide	1
111	502500200067	screw	1
112	502904010078	Evaporator front cover	1
113	502201010014	R duct foam cover	1
114	501157010018	R fan motor bracket	1
115	502500200067	screw	3
116	502201010015	R duct foam right cover	1
117	501157010048	UV fresh lamp cover	2
118	502500200067	screw	3
119	501157010112	air channel	1
120	502500200067	screw	2
121	501157010005	variable temperature compartment throttle mask	1
122	502201010012	air channel foam	1
123	502201000143	variable temperature compartment throttle foam	1

124	502101000273	throttle waterproof sponge	1
125	501257010015	bottom beam	1
126	500757010001	separated plate	1
127	501157010089	F fan blades	1
128	501157010034	bracket	1
129	502500200067	screw	4
130	500501200191	aluminum foil tape	1
131	502404000148	F fan motor	1
132	500501200192	aluminum foil tape	1
133	501554210002	F finned tube evaporator assembly	1
134	501157010074	F slide left bracket	2
135	502500200067	screw	6
136	501157010011	F lamp cover	1
137	502410000099	F LED PCB	1
138	502409000106	F lamp socket	1
139	501157010078	F slide left bracket	2
140	501157010105	adjustable foot	2
141	502500100058	screw	3
142	501157010057	shaft sleeve	2
143	502905000055	middle hinge	1
144	502500200034	screw	4
145	50230101003Q	main control PCB	1
146	500757010009	main controller mounting-box cover	1
147	501757010003	condenser evaporator plate assembly	1
148	500757010007	compressor chamber cover	1
149	502500200067	screw	4
150	501157010006	drain tube	1
151	502799900045	drain tube connector	1
152	501441110003	compressor	1
153	502799900038	pad	3
154	502404000147	C fan motor	1
155	502799900039	pad	3
156	501157010025	motor fixed cover	3
157	502799900040	pad	3
158	501157010103	cooling fan motor bracket	1
159	501160010001	fan blades	1
160	501602000037	filter	1
161	501157010102	back foot wheel	2
162	500755810005	wheel axle	2
163	502501200010	screw assembly	1
164	500757010013	compressor mounting panel	1
165	50240101001K	power cable	1

B40DSS
570 Litre 4 door
frost free fridge-freezer

INSTRUCTION MANUAL



USER MANUAL FOR YOUR BAUMATIC

B40DSS

570 Litre 4 door
frost free fridge-freezer




NOTE: This User Instruction Manual contains important information, including safety & installation points, which will enable you to get the most out of your appliance. Please keep it in a safe place so that it is easily available for future reference, for you or any person not familiar with the operation of the appliance.

JW 11/06/13

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Note: Before discarding an old appliance, switch off and disconnect it from the power supply. Cut off and render any plug useless. Cut the cable off directly behind the appliance to prevent misuse. This should be undertaken by a competent person. Disable the door lock to make sure that children cannot get stuck inside the appliance.

This appliance is marked according to the European directive 2002/96/EC on Waste electrical and Electronic Equipment (WEEE). By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.

The symbol  on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

Disposal must be carried out in accordance with local environmental regulations for waste disposal.

For more detailed information about treatment, recovery and recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

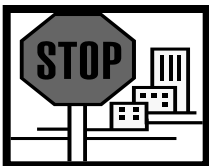


- The packaging materials that Baumatic uses are environmentally friendly and can be recycled.
- Please discard all packaging material with due regard for the environment.

Important safety information



Your safety is of the utmost importance to Baumatic. Please make sure that you read this instruction booklet ***before*** attempting to install or use the appliance. If you are unsure of any of the information contained in this booklet, please contact the Baumatic Advice Line.



IMPORTANT: Any installation work must be carried out by a qualified electrician or competent person.

Use of the appliance

- Your appliance is only designed to be used in the home. It is suitable for storing food that needs to be chilled and refrigerated. If it is used for any other purpose or it is not used correctly, then Baumatic Ltd. will accept no liability for any damage that is caused.



- Altering the specification of the appliance must not be attempted for reasons of safety.

Before using your appliance

- Check the appliance for any signs of transport damage. If you notice any damage, then you should not connect your appliance to your mains supply and should contact your retailer.

Refrigerant

- Your appliance contains R600a refrigerant, which is a natural gas that does not contain CFCs that can damage the environment. However it is a flammable substance, therefore care should be taken:
 - During the transportation and installation of the appliance, make sure that the refrigeration pipe-work does not get damaged.
 - If it does become damaged then sources of ignition and open flames should be avoided. Also the room that the appliance is situated in should be thoroughly ventilated.

- Do not place any objects on top of the appliance, as this may damage the table top.



Child safety

- Packaging material should be kept away from children.
- Children should not be allowed to touch the controls or play with the appliance.

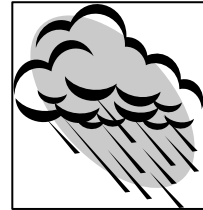


General safety

- Do not pull on the power supply cable to remove the plug from your mains supply socket.

- Do not pull out or insert the plug with wet hands.

- Do not attempt to use your appliance outdoors or any place where it is likely to come into contact with the elements.



- Before cleaning the appliance or performing maintenance work, ensure that the appliance has been disconnected from your mains supply.

- Never allow the back coils of the appliance to come into contact with the wall surface.

- Always ensure that the location where you are installing your appliance is free of stored items such as papers and other flammable materials.

- Never block the ventilation openings of the appliance, either on the inside or its exterior.

- It is vital to keep your appliance well ventilated, so that there is proper air flow between the bottom of the unit and the plinth/kick plate which it is sitting on.

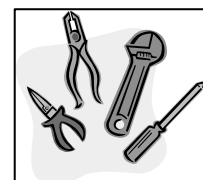


- Do not place electrical devices inside of the appliance, such as mixers or ice cream makers.

- Do not store aerosol cans with a flammable propellant in this appliance.

Service

You should not attempt to repair the appliance yourself, as this could cause injury or a more serious malfunction. If you require a service call then please contact the Baumatic Customer Care Department.



Specifications of your fridge freezer

Dimensions of your appliance

- Height: 1775 mm
- Width: 911 mm
- Depth: 728.5 mm (excluding handles)

Energy efficiency class

- Energy class: A+

Cubic capacities

- Total gross/net capacity: 570/542 litres
- Gross capacity (fridge/freezer): 425/145 litres
- Net capacity (fridge/freezer): 422/120 litres

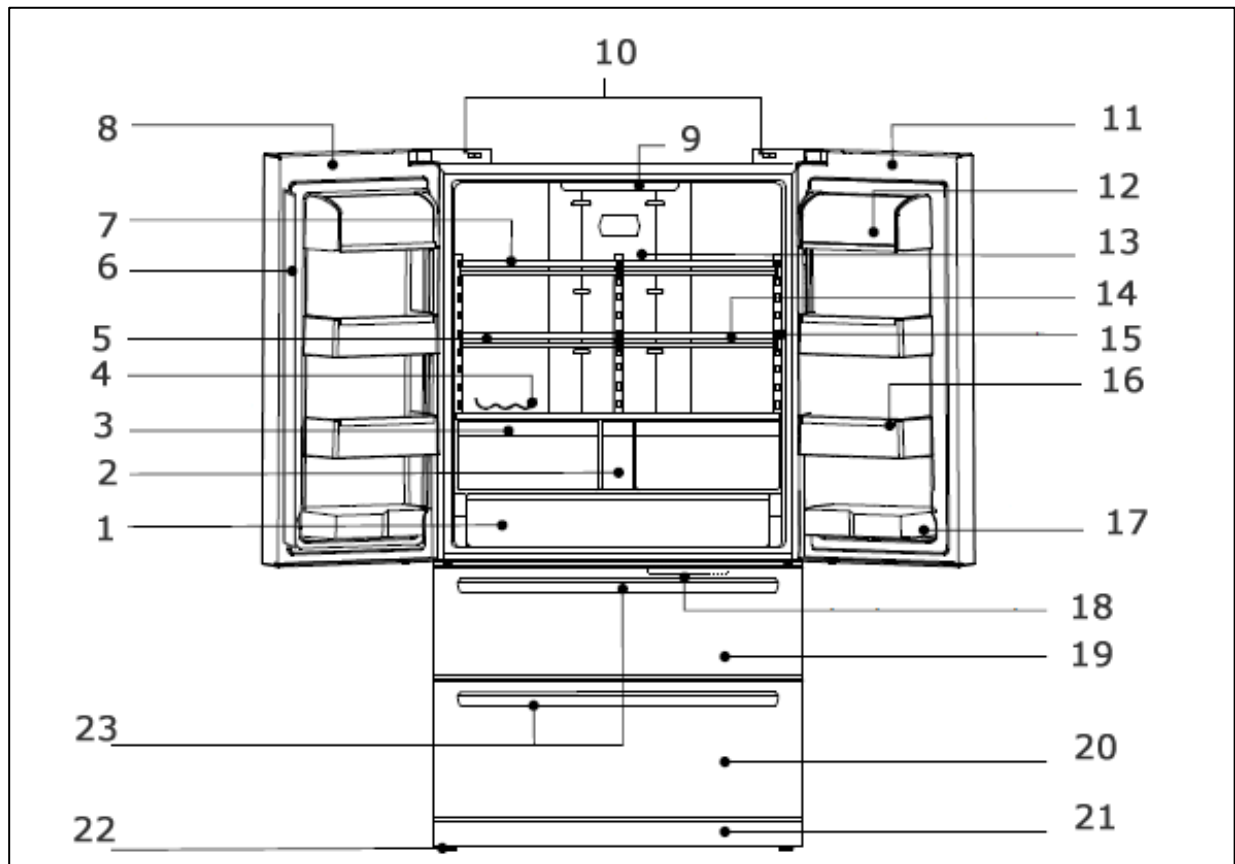
Specifications of the appliance

- Frost free fridge and freezer
- Star rating ****
- Multi airflow cooling system
- Electronic temperature control
- Digital control panel
- Adjustable thermostat
- Fast cooling switch
- Fast Freeze switch
- Fast freeze indicator light
- Door open warning indicator
- Temperature rise warning indicator
- Adjustable feet
- Mark resistant coating
- 4 Adjustable fridge safety glass shelves
- 1 Salad crisper shelf (Safety glass)
- 2 Salad crispers
- 1 Full width pantry drawer
- 2 Bottle racks
- 4 General door racks
- 2 Butter and cheese compartments
- 2 Egg racks
- 1 Wine rack
- 2 Non-transparent freezer drawers
- Twist ice maker

IMPORTANT: When you install your appliance it is important to bear in mind its climatic rating.

In order to find out the climatic rating of your appliance, you should check the rating plate. The rating plate is located inside of the fridge section, on the left side. You will need to open the door of the fridge section and you may need to remove one of the middle safety glass shelves. The rating plate will indicate the ambient temperature range that your appliance will function correctly within.

Description of the appliance

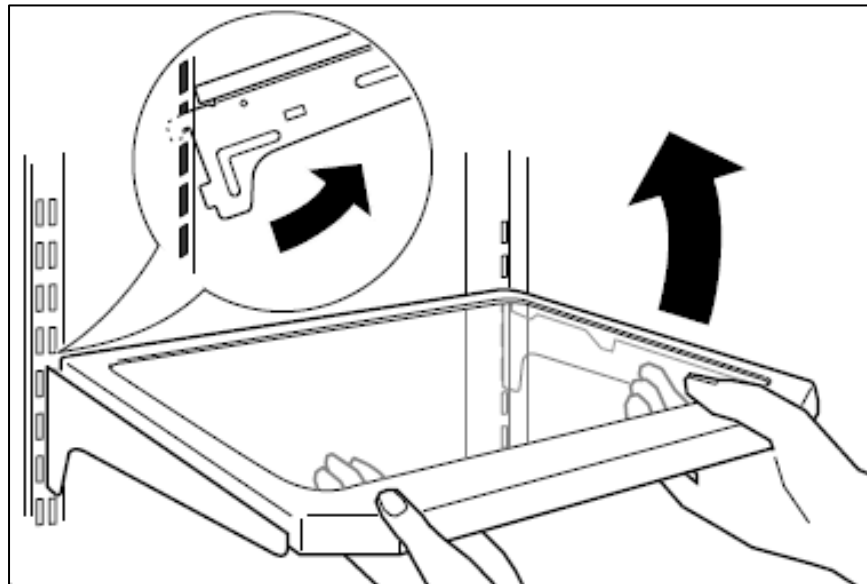


- | | |
|------------------------------------|-----------------------------------|
| 1) Pantry drawer | 13) Rear wall airflow cover plate |
| 2) Storage compartment | 14) Adjustable safety glass shelf |
| 3) Salad crisper (x2) | 15) Interior side light |
| 4) Wine rack | 16) Bottle rack |
| 5) Adjustable safety glass shelf | 17) General door rack |
| 6) Vertical girder | 18) Freezer interior light |
| 7) Adjustable safety glass shelf | 19) Upper freezer drawer |
| 8) Left refrigerator door | 20) Lower freezer drawer |
| 9) Top interior light | 21) Bottom beam/ kick plate |
| 10) Light switch/door close sensor | 22) Adjustable feet |
| 11) Right refrigerator door | 23) Freezer door handles |
| 12) Dairy compartment | |

Description of product features (fridge)

Adjustable safety glass shelves

- The shelves may be placed in any of the guide slots within the interior of the appliance. They are protected from sliding out.



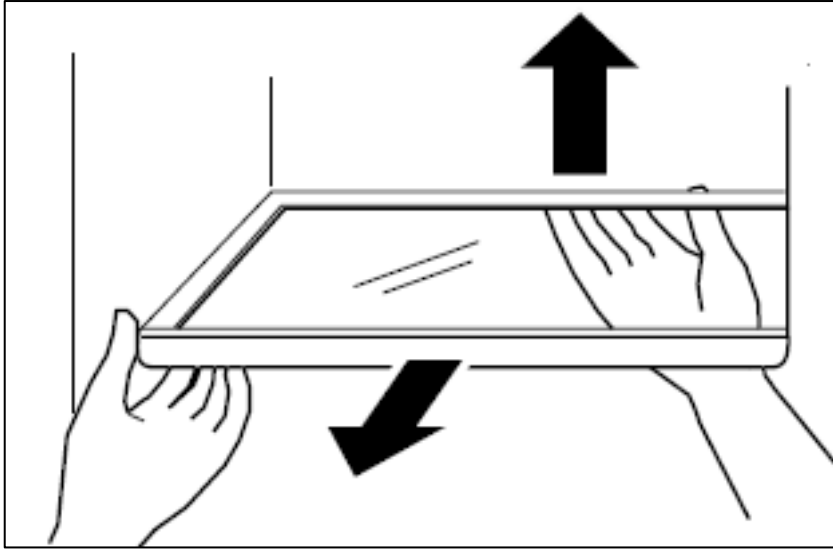
- To remove a shelf: Take off all of the items that are stored on the shelf that you want to remove. Then whilst lifting the front of the shelf, pull it forwards to unhook it from the slots at the rear of the cabinet.
- To refit a shelf: When placing a shelf back inside the fridge compartments, place the hooks into the slots at the rear of the cabinet. Lower the front of the shelf back down again.

IMPORTANT: You must ensure that both of the hooks are in slots that are at the same height; otherwise the shelf will not be level.

Salad crispers

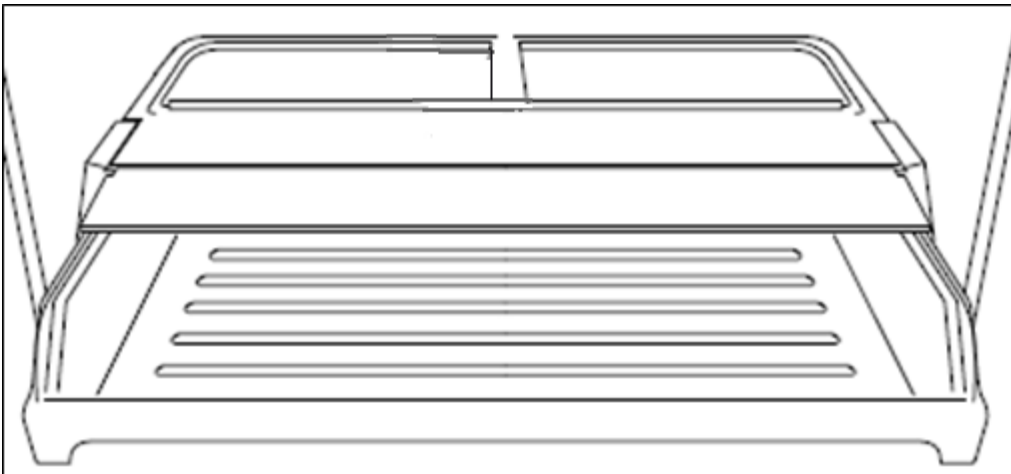
- These drawers are suitable for storing fruits, salad and vegetables. They are designed to keep the contents fresh for as long as possible.
- Care should be taken when storing tropical fruit (bananas and pineapples etc) and tomatoes. As these types of items can easily deteriorate at a lower temperature.

- To remove the safety glass crisper cover, remove the salad crisper drawers, lift up the cover and then pull it towards you (as shown in the line drawing below).



- For the storage of meat and fish, we would recommend that they are stored in a foil cover or a vinyl wrap.

Full width pantry



- For the storage of meat and fish, we would recommend that they are stored in a foil cover or a vinyl wrap.
- Care should be taken when storing tropical fruit (bananas and pineapples etc) and tomatoes. As these types of items can easily deteriorate in a lower temperature.

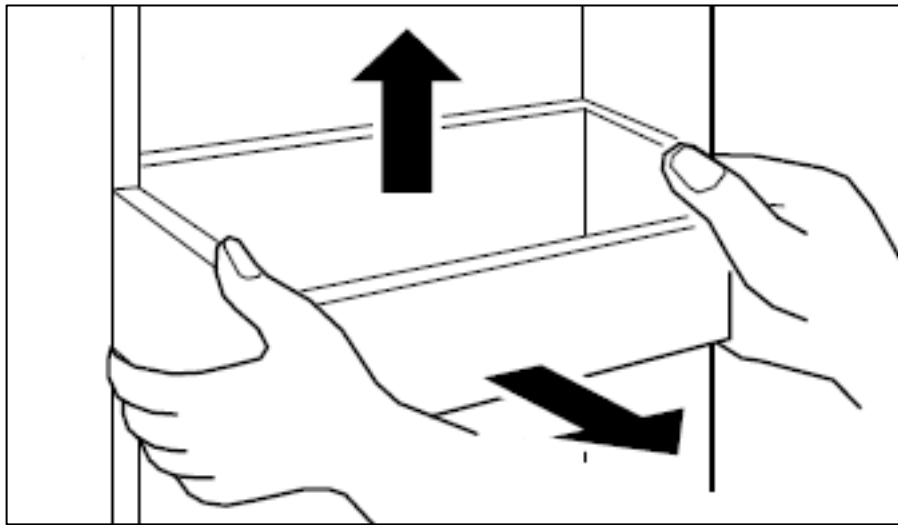
General door racks*

- The door liners hold various racks, which are suitable for storing eggs, cheese, butter, yogurt, smaller packages, tubes, cans etc.

Bottle racks*

- The upper middle door racks in each door should be used for storing reasonably sized bottles.
- ***IMPORTANT: IT IS IMPORTANT THAT NONE OF THE SHELVES THAT SIT IN THE DOOR ARE OVERLOADED, AS THIS WILL DRASTICALLY REDUCE THEIR WORKING LIFE.***

General and bottle door rack height adjustment

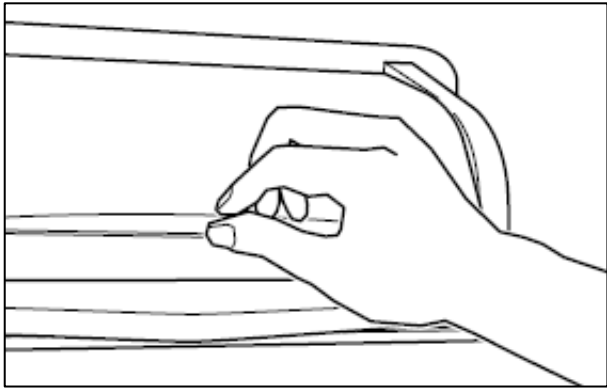


It is possible to adjust the height of the general door racks and bottle racks in the doors.

- Remove all items from the rack that you want to adjust the height of.
- Hold both sides of the shelf then lift it upwards and pull it towards you.
- Place the shelf back into the door at the height that you require and then push it downwards until it locates into position.

****NOTE: By adjusting the position of the door racks you will increase / decrease the storage height of adjacent racks. The upper and lower middle door racks can be used as bottle racks, providing there is suitable storage/height space.***

The dairy compartments

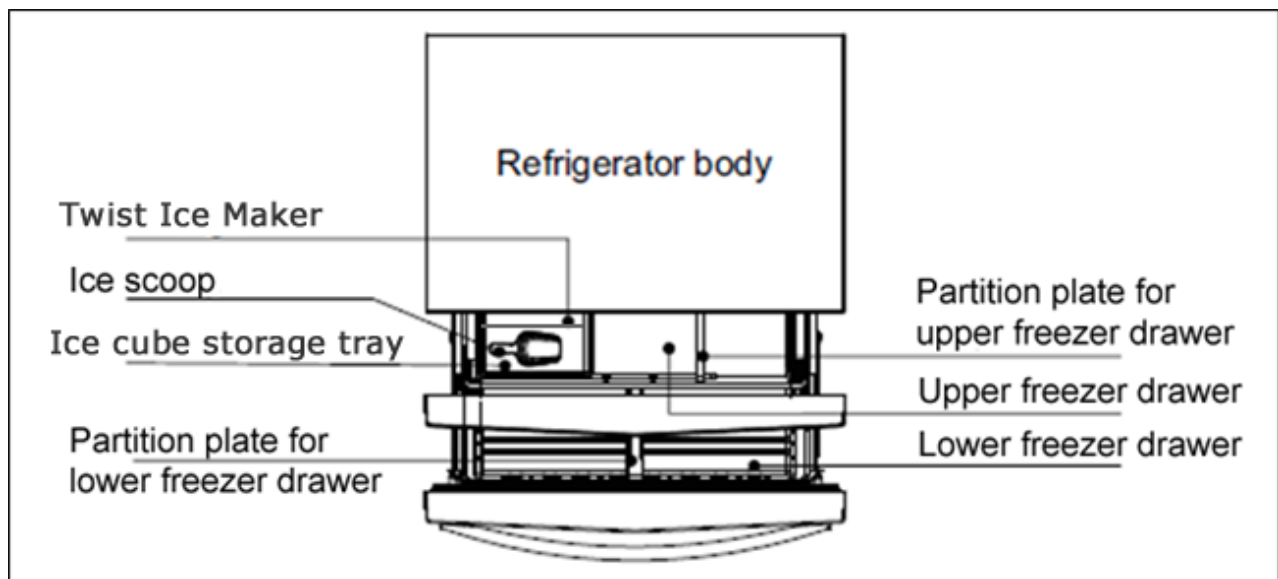


- The top racks on the fridge doors should be used to store eggs, butter, cheese, yogurts etc.

IMPORTANT: You should take care not to trap your fingers when opening and shutting the cover of the dairy compartments.

Description of the product features (freezer)

The freezer section consists of an upper and lower drawer.



- The lower freezer drawer is suitable for freezing and storing food that needs to be kept for longer periods of time.
- The upper freezer drawer contains the twist ice maker and the ice storage tray on the left hand side.
- The right hand side of the upper freezer drawer can be used to freeze food, to store ice or to store food that you use regularly.

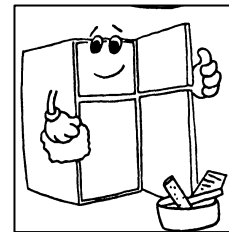
IMPORTANT: DO NOT pull the drawers out with too much force, or overload them as this may cause food to fall out when you are opening the drawer.

NOTE: The Twist ice maker is adjustable and can be moved to the opposite side of the drawer.

Using your Baumatic fridge freezer

Before switching on

- Remove all packaging materials before using the fridge freezer. This includes the foam base and all adhesive tape holding the refrigerator accessories in place both inside and outside the appliance.
- Make sure that it has been installed by a suitably qualified person, as per the information contained in Baumatic's installation instructions.
- After delivery, wait for six hours before connecting the appliance to your mains supply. This means that any refrigerant gasses that may have been disturbed during the transportation process are allowed to settle.
- The outside of the appliance and the removable accessories contained within it, should be cleaned with a solution of liquid detergent and water.
- The interior of the appliance should be cleaned with a solution of sodium bicarbonate dissolved in lukewarm water. The interior and accessories should be thoroughly dried, after the cleaning process has been completed.
- There can be an odour when you first switch on the appliance. It will lessen as the appliance starts to cool.



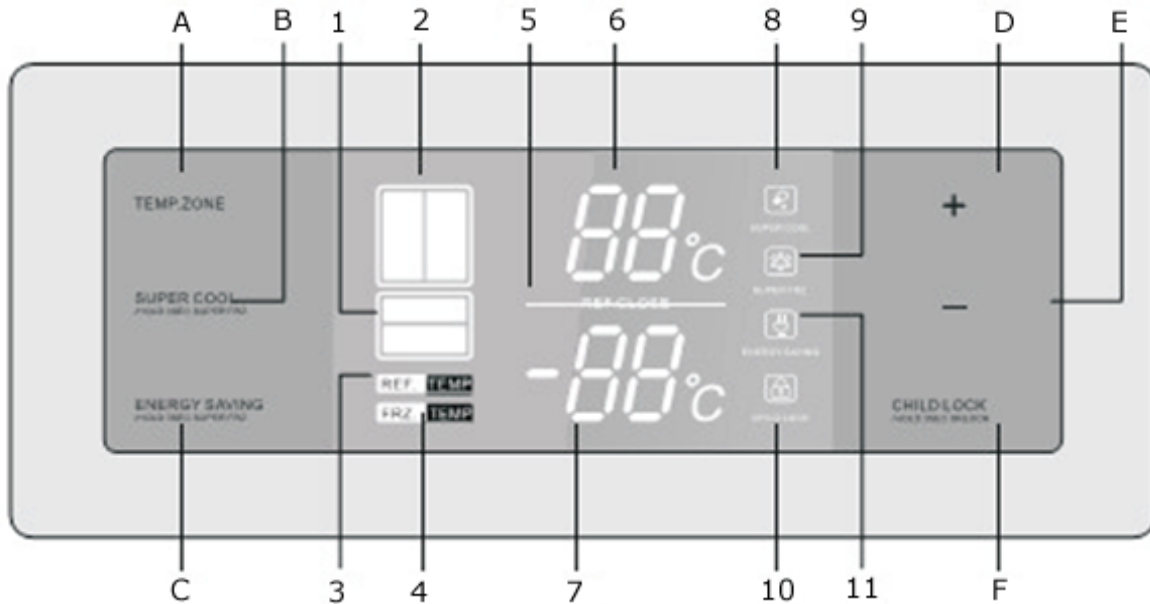
During first use

You switch on your appliance by connecting it to your mains supply and setting the thermostat. The thermostat dial is located in the upper centre of the fridge section.

- When you first switch on the appliance, the compressor may run continuously for approximately 24 hours or until the fridge freezer reaches a cool enough temperature.
- During this period of time, you should try not to open the door frequently or place a large amount of food within the appliance.
- If the unit is switched off or unplugged, you must allow at least 5 minutes before reconnecting it to your mains supply.
- If there is a power cut, the appliance will remember the temperature settings that were set previously.

Control panel

The control panel is located outside the refrigerator and is used to control the fridge and freezer.



Operation buttons

- A. **Temp Zone.** Use this button to select either the fridge or freezer.
- B. **Super Cool.** Use this button to select Super Cool or Super Freeze functions.
- C. **Energy Saving.** Use this button to turn on Energy Saving mode.
- D. **Plus button** ("+"). Increase selection button.
- E. **Minus button** ("-") . Decrease selection button.
- F. **Child Lock.** Use this button to lock the control panel from accidental misuse.

Display icons

- 1. Freezer icon
- 2. Fridge icon
- 3. Fridge temperature setting icon
- 4. Freezer temperature setting icon
- 5. Refrigerator Off icon
- 6. Fridge temperature display
- 7. Freezer temperature display
- 8. Super Cool icon
- 9. Super Freeze icon
- 10. Energy Saving icon
- 11. Child lock icon

Switching on the appliance

- You switch on your appliance by connecting it to your mains supply.
- When first turned on the appliance will automatically set the fridge to 5°C, and the freezer to -18°C. You can set the temperature in the fridge and freezer sections manually at any time.

Manually setting the fridge temperature.

- Press the 'TEMP ZONE' button (A) once (or until the refrigerator icon (3) illuminates).
- Then press the plus (D) or minus (E) button to adjust the temperature of the refrigerator.
- The temperature will change 1°C each time the plus or minus button is pressed and will scroll through a range of 2°C - 8°C.

The chosen temperature will take effect after 30 seconds.

Manually setting the freezer temperature.

- Press the 'TEMP ZONE' button (A) twice (or until the freezer icon (4) illuminates).
- Then press the plus (D) or minus (E) button to adjust the temperature of the freezer.
- The temperature will change 1°C each time the plus or minus button is pressed and will scroll through a range of -15°C – -24°C.

The chosen temperature will take effect after 30 seconds.

IMPORTANT: *The ambient temperature of the room, the temperature of food and the amount of food that has been placed in the fridge / freezer and how often the door is opened, will all affect the temperature being maintained by the appliance.*

Switching on super cool mode

This setting should be used if you want to chill something quickly, it will ensure that a powerful supply of cold air enters the fridge section.

- Press the 'SUPER COOL' button (B) on the control panel. The Super Cool icon (8) will illuminate.
- The temperature will be set to 2°C for 2.5 hours

NOTE: You can manually return the appliance to normal operation by unlocking the control panel (if required) and pressing the SUPER COOL button (B) once. The Super Cool icon (8) will turn off.



IMPORTANT: You should not run the appliance in rapid cooling mode for prolonged periods. After the food is sufficiently chilled you should return the appliance to normal operation.

Switching on super freeze mode

This setting should be used before and whilst you are freezing fresh food, it will ensure that a powerful supply of cold air enters the freezer section.

- Press the 'SUPER COOL' button (B) on the control panel for 3 seconds. The Quick Freeze icon (9) will illuminate.
- The temperature will be set to -24°C for 2.5 hours

NOTE: You can manually return the appliance to normal operation by unlocking the control panel (if required) and pressing the SUPER COOL button (B) for three seconds. The Super Cool icon (8) will turn off.



IMPORTANT: This mode should only be used prior to and when freezing fresh food. You should not run the appliance in fast freeze mode for prolonged periods.

Switching on energy saving mode

This setting should be used if you wish to save energy when using your appliance. It will increase the temperature slightly in the fridge and freezer sections to save energy.

- Press the 'ENERGY SAVING' button on the display to turn energy saving mode on and off. When it is on the energy saving symbol (11) will be illuminated. The fridge will be set to 7°C and the freezer to -15°C



IMPORTANT: *You should not run the appliance in energy saving mode if you want to freeze fresh food in the freezer section. Before attempting to freeze fresh food you should return the appliance to normal operation and use the fast freeze mode.*

Turning off the fridge section.

You can manually turn off the fridge section of the fridge-freezer.

- Press and hold the 'ENERGY SAVING' button (C) for 3 seconds. The Fridge icon (2) will turn off and the Fridge Off icon (5) will turn on. The Fridge temperature display (6) will show "-- --".
- Press and hold the 'ENERGY SAVING' button (C) for 3 seconds to turn the fridge section back on. The Fridge icon (2) will turn on and the Fridge Off icon (5) will turn off. The fridge will automatically turn on to the temperature that was previously set.

Locking and unlocking the control panel

- Press the 'CHILD LOCK' button (F) to lock the control panel. The Child lock icon (10) will illuminate on the control panel.
- Press and hold the 'CHILD LOCK' button (F) for 3 seconds to unlock the control panel. The Child lock icon (10) will turn off.

NOTE: *The control panel will automatically lock after 25 seconds of inactivity.*

Returning the appliance to normal operation

- Please see the relevant section for turning operational modes on/off.
- **IMPORTANT:** If you have fast freeze and rapid cooling modes active simultaneously, then you will need to cancel them separately.
- Manually changing the temperature of a section within the fridge or freezer will deactivate any relevant operating mode (super cool, super freeze, energy saving).

IMPORTANT: Ensure that the corresponding display icon has been turned on/off for any function that you are turning on/off.

Door left open alarm

- If any door/drawer is left open for more than 90 seconds an audible alarm will sound.
- When you hear the audible alarm, you should immediately check that all of the doors/draws are shut properly.
- Once you have ensured the doors are closed properly press any button on the control panel and the alarm will stop.

Temperature rise alarm (freezer)

- If the internal temperature of the freezer rises above -8°C for over 6 hours continuously then an audible alarm will sound.
- When you hear the audible alarm, you should immediately check that all of the draws are shut properly.
- After the initial alarm, the alarm will sound every 30 minutes for 10 seconds, until the internal temperature of the fridge reaches below -12°C

IMPORTANT: The temperature rise alarm will not stop sounding until the internal temperature has reached below -12°C , even if all the draws are closed or the control panel buttons are pressed.

NOTE: If after 1 hour of ensuring that the draws are properly closed the temperature of the freezer is not falling below -12°C and/or the alarm is still sounding you should contact customer services.

Arranging and storing food in the fridge section

- Warm food or evaporating liquids should not be stored in your refrigerator, as this will increase the humidity inside of the appliance.
- All foods should be wrapped or covered, this is particularly important if the food has a strong flavour. You should use polythene bags or sheets, aluminium foil, wax paper. Liquids should be stored in covered containers or bottles.
- To maximise the space inside of the fridge section, any excessive packaging on the food should be removed.

- Quickly perishable food should be stored at the back of the refrigerator, which is the coldest part of the appliance.
- No food items should be allowed to come into contact with the back wall of the refrigerator.
- Make sure that you arrange food in such a way that the door can close completely. Particular attention should be given to bottles that may protrude when placed on shelves inside the main section of the refrigerator.
- Some organic solutions, such as the oils in lemon/orange peel and acid in butter, can cause damage to the plastic parts contained inside of the refrigerator.
- Do not open the refrigerator door too often or leave the door open for long periods of time, as this will increase the temperature inside of the appliance.
- **Meat** should be wrapped in polythene bags and then placed on the glass shelf above the salad crisper drawer or in the pantry drawer.
- **Cold dishes/cooked food** should be covered and can be placed on any shelf or the pantry drawer.
- **Salad and vegetables** should be cleaned thoroughly and placed in the salad crisper drawers.
- **Fruit** should be cleaned thoroughly and placed in the salad crisper drawers.
- **Cheese and butter** should be placed in airtight containers, or they can be wrapped in aluminium foil or polythene bags. As much air as possible should be removed from the bags.
- **Milk bottles** should have a cap on them and be stored on the bottle shelves that sit in the door.
- **Garlic, potatoes, onions and bananas should only be stored in a refrigerator IF they are stored in airtight containers.**

The freezer section is suitable for storing and freezing food.

- The freezer section temperature must have already reached -18 degrees centigrade (or lower) before you attempt to store food that is already frozen or freezing fresh food.
- The freezer section is only able to freeze a certain quantity of fresh food at one time. The maximum amount of fresh food (in kilograms) that can be frozen in a 24 hour period is 10 kg.
- Warm food should be allowed to cool down before you attempt to freeze it. If you place warm food in the freezer section, then the increased humidity will cause quicker ice formation and increase the amount of power that the appliance uses.
- The guidance of the food manufacturer should be followed, in regard to the maximum storage time.
- Thawed foods must not be frozen for a second time.

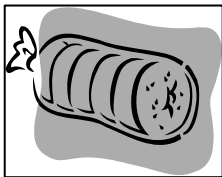
Freezing fresh food



- To freeze fresh food you should set the freezer to super freeze mode (see page 16) 2.5 hours *prior to attempting freezing*.
- Once you have added the food, you should then run the super freeze mode again for another 2.5 hours.
- Fresh food should be packed into airtight containers or packaging. This will help to make sure that the food doesn't dry out or lose its flavour. It will also ensure that flavour does not transfer from other foods.
- Do not allow fresh food to touch items that are already frozen.
- After 2.5 hours you should check that the fresh food is satisfactorily frozen. If it is then you should allow the appliance to return to normal temperature settings. If it is not, then run super freeze mode for another 2.5 hours.

Tips on freezing

- Freezer bags, polythene wraps, aluminium foil (extra thick) and special cans for frozen foods are suitable packaging for storing frozen goods in.



- Tape, rubber bands or plastic clips are suitable for sealing bags and wrappings.

- Before sealing a suitable bag, you should compress the air out of it, as this will help the food to freeze more easily.



- Flat packages freeze more easily.
- If you are freezing liquid, then do not fill the container to the brim. Liquids will expand when being frozen.

- ***Do not place bottles (glass or tin) containing liquids (especially sparkling liquids) into the freezer as this could cause the bottle to burst during freezing.***

Storing commercially frozen food

- The storage time and recommended temperature for storing commercially frozen foods are indicated on the packaging.
- Always follow the manufacturer's instructions for storage and use of frozen food.
- When shopping, be careful to choose food which is adequately packed and is provided with complete storage instructions. It should have been stored in a freezer where the temperature does not rise above -18°C .
- Do not buy packages of food that are covered with frost. This could indicate that the package has thawed at least once before.
- Take care that your frozen food packages do not start to thaw before you place them in your freezer. This will shorten the length of time that you can safely store the food for.

Defrosting frozen food

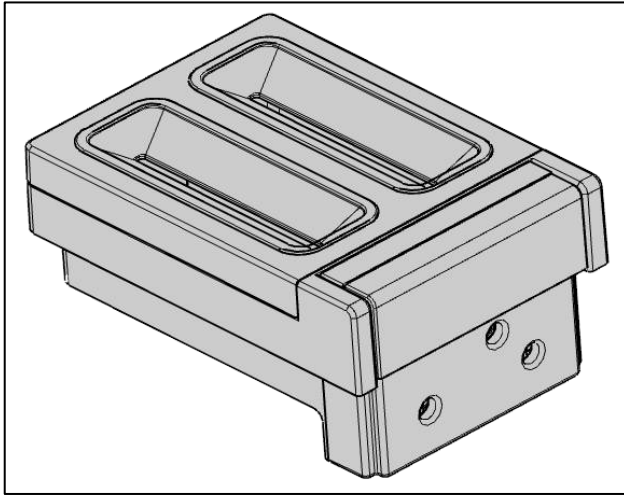
- Partially thawed or defrosted foods should be used as soon as possible.
- Cold air preserves the food but it does not destroy the micro organisms which rapidly activate themselves after defrosting and make foods perishable.
- Partial defrosting reduces the nutritional value of food, especially fruits, vegetables and readymade meals.

In the event of a power cut

- If there is a power cut, then food inside of the appliance will remain at a safe temperature for approximately 15 hours.
- If the power cut is short, then the best place to leave the frozen food is inside of the freezer compartment. Particularly if there are ice cubes inside the of the upper freezer drawer, as this will help to maintain the temperature.
- If there is a prolonged power cut, then you may need to remove food from the freezer section and store it in a cold place. To preserve the temperature, you should wrap the food in layers of newspaper.
- Once power is restored, if the food has not started to defrost, then it should be returned to the freezer section.
- If any of the food has started to defrost, then you should not return it into the freezer section, it should be consumed within a short period of time.

Using the twist ice maker

- The twist ice maker has to be manually filled with water. To do this you should pull out the top drawer to allow access, or if preferred you can remove the ice maker from the drawer, and then fill it with cold, drinkable water.



- You should be careful not to over-fill the ice maker as the excess water will quickly turn to ice. You can use the small jug provided to help reduce spillage.
- Once the water has formed into ice cubes, you should then press down the lever on the front of the ice box to deposit ice into the ice cube storage section below.
- Once ice has been deposited, you can then refill the twist ice maker with water.
- You should clean the ice cube storage case regularly using warm water. The ice maker can be removed from the freezer drawer and the top cover can be removed from the ice maker to aid in cleaning. You should dry the ice cube storage section thoroughly.
- If you are not going to use the ice cubes contained in the ice cube storage section for a long period of time, then you should clear the remaining ice cubes.

Normal operating noises

Ice cracking noise

- Can be heard during the automatic defrosting process.
- Can be caused by expansion and contraction within the icebox.

Short cracking noise

- Can be heard when the thermostat turns the compressor on and off.

Compressor noise

- There will be an operating noise when the compressor is running.
- After installation, the compressor may be noisier for a short period of time.

Bubbling and burbling sound

- This noise is emitted as the coolant flows through the pipework within the fridge.

Water flowing sound

- This is caused by water flowing into the evaporating tray during the defrosting process and can be heard whilst the fridge is defrosting.

Important user information



IMPORTANT: Care should be taken to make sure that the airflow duct vents on the rear interior wall of the fridge and freezer sections are not blocked.



IMPORTANT: If your mains power supply fails, then the food inside of the freezer section will be preserved for a 15 hour period. After 15 hours the food should be removed from the freezer section and consumed as quickly as possible.

Saving energy when using your fridge-freezer

Installing:

- Install the appliance in a cool position. If it is placed in direct sunlight or next to an oven or other heat source, the energy consumption can increase substantially.
- Ensure the appliance is installed with the correct ventilation requirements. Restricting ventilation can increase the energy consumption by 15%.

Cleaning and Maintenance:

- Occasionally clean the condenser coils (if present) at the back of the appliance to maintain a high performance level.
- Clean the door gasket with warm water or a neutral detergent that leaves no residue. A tight-sealing door gasket is critical to the efficiency of your appliance.

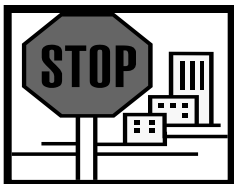
Usage:

- Do not open the door repeatedly or more frequently than you have to.
- Do not set the thermostat too low. A change of just one degree can effect the energy consumption by 5%. Use a thermometer to check the temperature.
- The freezer compartment should operate at -15 to -18 degrees Celsius. The refrigerator should operate at around 3 to 4 degrees Celsius.
- Allow food to sufficiently cool before putting it in the appliance (but don't let it sit at room temperature for too long).
- In the freezer compartment, food packages should be scattered and never grouped or stacked together until they are completely frozen.
- If you are going away for a long period of time, turn off the appliance, empty and clean it and leave the door ajar.
- If you have a second appliance that is not used, make sure that it is stored with the power off and the door left ajar until it is actually required.

Disposing:

- If you're going to throw out your old fridge, see if there's a chlorofluorocarbons (CFCs) recycler in your area. The government department which looks after the environment in your area may be able to help you.

Cleaning and maintenance

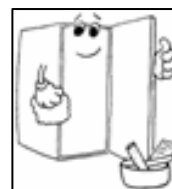


WARNING: PLEASE ENSURE THAT YOUR APPLIANCE IS DISCONNECTED FROM YOUR MAINS SUPPLY BEFORE ATTEMPTING TO CLEAN IT.

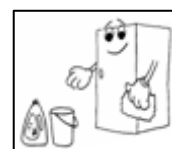
- Do not clean the appliance by pouring water onto it or spraying water over it.



- The refrigerator and freezer section should be cleaned periodically, using a solution of bicarbonate of soda and lukewarm water.



- Clean the accessories separately with soap and water. Do not clean them in a dishwasher.

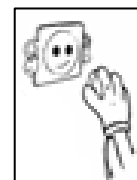


- Do not use abrasive products, detergents or soaps.



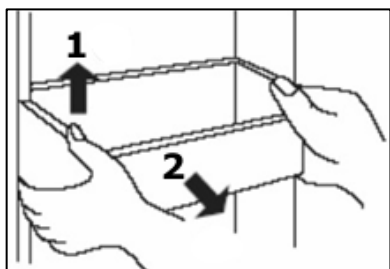
- After washing the appliance, wipe over the area that you have cleaned with a damp cloth and then dry it thoroughly.

- When cleaning is complete, dry your hands and then reconnect the plug to your mains supply.



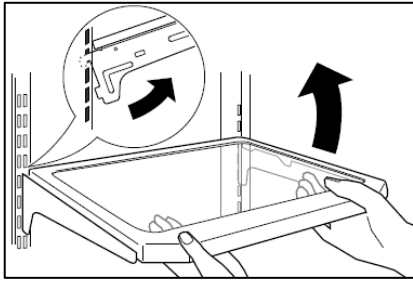
IMPORTANT: Before attempting any of the cleaning steps shown below, you should remove all items from the shelves and sections that you are cleaning.

Fridge door sections



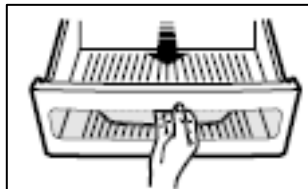
- To remove a door rack: Take off all of the items that are stored on the rack that you want to remove. Pull the rack upwards **(1)** and then carefully pull it away from the inside of the door **(2)**.

Fridge shelves



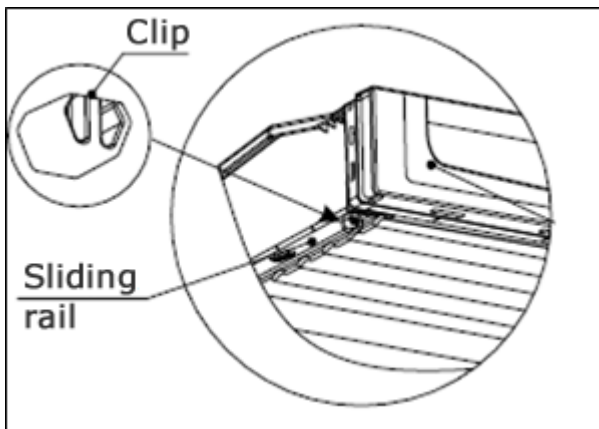
- To remove a shelf: Take off all of the items that are stored on the shelf that you want to remove. Then whilst lifting the front of the shelf, pull it forwards to unhook it from the slots at the rear of the cabinet.

Salad crisper drawers

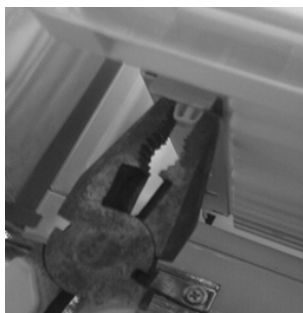


- To remove a drawer, lift up a little and pull forward.

Full width pantry



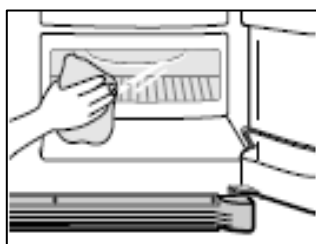
- To remove the pantry drawer, first pull out the drawer as far as it will go.
- Locate the clips which are *underneath* the drawer, on the sliding rail on either side.



- Squeeze the clips to release the drawer from the sliding rails. (You may need to use a pair of pliers)

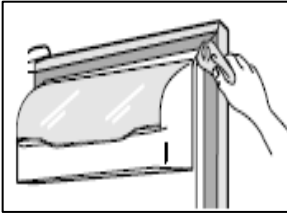
- Reinstall the drawer by inserting the draw back into the sliding rails, ensuring that the two clips click back into the holes in the rail.

Interior parts



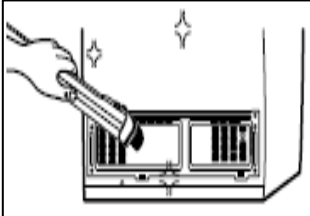
- Use a cloth that has been wetted with water and mild (neutral) detergent and wipe over the interior parts of the appliance.

Door seal

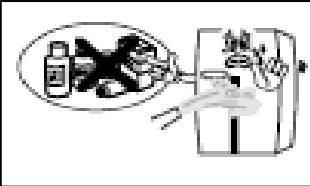


- Use a cloth that has been wetted with water and mild (neutral) detergent and wipe around the door seal.

Rear grill



- At least once a year, remove any dust that has gathered on the grill at the rear of the appliance, using a vacuum cleaner.



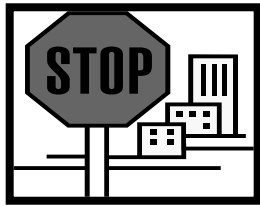
DO NOT USE ANY FORM OF ASOLINE (PETROL) OR BENZENE (BENZOL) THINNERS ON ANY AREA OF THE APPLIANCE. AS THESE CHEMICALS CAN DAMAGE THE SURFACES.

The light bulb

WARNING: This product is fitted with durable LED bulbs which last for approximately 10,000 hours. Therefore, there is no need to change the bulb unless it is faulty or damaged. If a bulb does need replacing, do not change the fuse or LED lamp on your own. Please call the Baumatic Customer Care Department to arrange an engineer visit.

Spare washers (Circlips) – door adjustment.

In your installation pack you will find two circlip washers. These are not generally required, however should the doors malfunction through being overloaded or damaged in some way, it can lead to the vertical girder catching on the appliance frame. If the doors are not closing properly then the washers can be used as spacers – to lift the doors slightly. To do this, you should Lift the door slightly and insert the washer between the hinge and the door on both doors.



IMPORTANT: Before installation and usage read all the instructions and make sure that the voltage (V) and the frequency (Hz) indicated on the rating plate are exactly the same as the voltage and frequency in your home. The rating plate can be found behind the salad crisper drawers.

The manufacturer declines all responsibility in the event of the installer failing to observe all the accident prevention regulations in force, which are necessary for normal use and the regular operation of the electric system.

Electrical connection



YOUR FRIDGE FREEZER IS INTENDED FOR FITTED AND PERMANENT INSTALLATION.

We recommend that the appliance is connected by a qualified electrician, who is a member of the N.I.C.E.I.C. and who will comply with the I.E.E. and local regulations.

- Your refrigerator comes supplied with a 13 amp plug fitted. If in future you need to change the fuse in this plug, then a 13 amp ASTA approved (BS 1362) fuse ***must*** be used.
- The refrigerator should not share a multi-purpose socket with other electrical appliances.
- The wiring in the mains lead is coloured as follows:

<i>Brown</i>	Live
<i>Blue</i>	Neutral
<i>Green and yellow</i>	Earth

- As the colours of the wires in the appliance's mains lead may not correspond with the coloured markings identifying the terminals in your spur box, please proceed as follows:

The ***brown wire*** must be connected to the terminal marked "L" (live), or coloured ***red***.

The ***blue wire*** must be connected to the terminal marked "N" (neutral), or coloured ***black***. The ***green and yellow wire*** must be connected to the terminal marked "E" (earth), or by the earth symbol, or coloured ***green and yellow***.

- When the connection is completed, no stray strands or cut wire should be present. The cord clamp must be secured over the outer sheath.

Positioning

- It is advisable that your appliance is only installed in a location where the ambient temperature of the room, corresponds with the climate classification that is stated on the rating plate of your appliance. Your appliance may not function correctly if the ambient temperature falls outside of the following ranges.

<i>Climate classification</i>	<i>Appropriate ambient temperature</i>
SN	+10 to +32 degrees centigrade
N	+16 to +32 degrees centigrade
ST	+18 to +38 degrees centigrade
T	+18 to +43 degrees centigrade

- Positioning the appliance requires two persons in order to avoid injuries or damage to the appliance.
- Your appliance should not be located in direct sunlight or exposed to continuous heat or extremes of temperature (e.g. next to a radiator or boiler). If this is not feasible, then you should install an insulation plate between the appliance and the adjacent heat source.
- You should check whether there is an electrical socket available, which will be accessible after your appliance is installed.
- Place the appliance flatly and firmly on a solid base. The appliance is fitted with adjustable feet on the front side, which can be used to level the appliance.
- The rear side of the appliance is fitted with wheels which facilitate the positioning of the appliance into its final location.
- Anything positioned above the appliance must be at least 30 cm away to allow sufficient cooling of the condenser. You must allow a 10 cm gap either side of the appliance and a 10 cm gap to the rear.
- If you are placing another cooling appliance next door to this product, then there must be a gap of at least 10 cm between the appliances. This will help to prevent condensation from forming.
- Be sure to leave enough space for the opening of the door, to avoid damage to the appliance or personal injury.

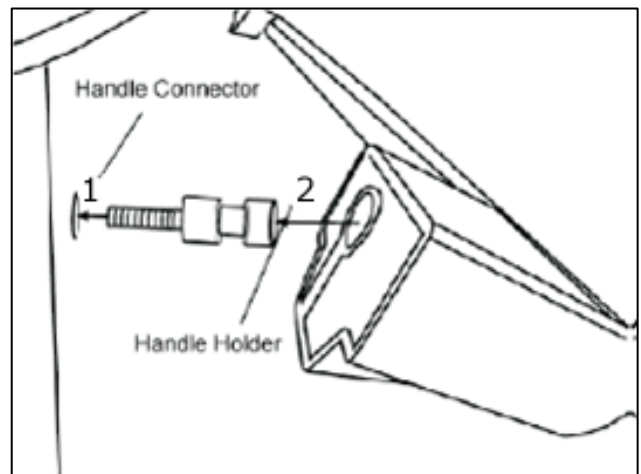
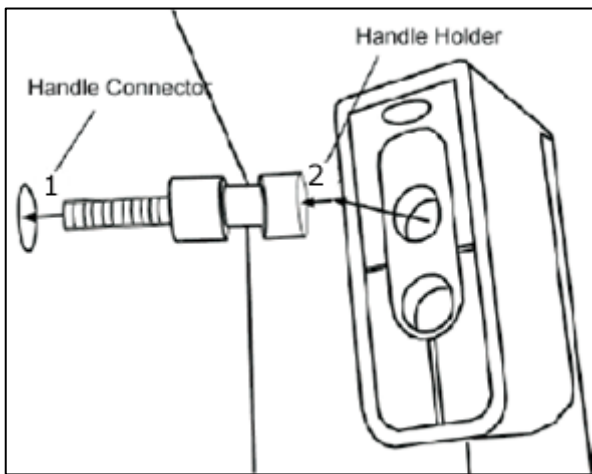
Installation preparation



IMPORTANT: *A minimum of two people should complete all of the installation steps given in this manual.*

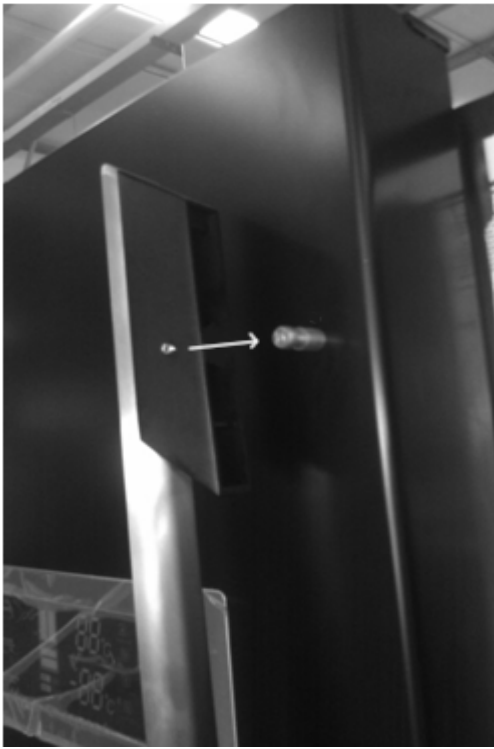
- Check that the appliance will easily pass through all doorways en-route to its final position.
- Appliance dimensions: 1775 mm (h) x 911 mm (w) x 728.5 mm (d) (excluding door handles).

Installing the fridge/freezer handles



- Using a cross-head screwdriver, screw in the double fixing screws (handle connectors) into the fixing holes (1) which are located on the appliance.

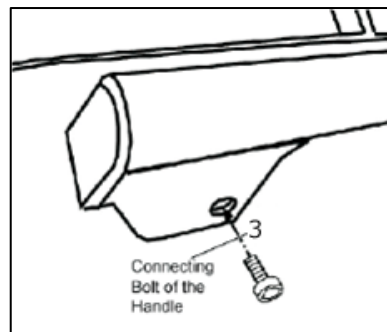




- Insert the door handle onto the double fixing screws (2).
- Ensure that the double fixing screws slot into the fixing screw holes in the handle.
- ***IMPORTANT: You must attach both ends of a handle at the same time.***



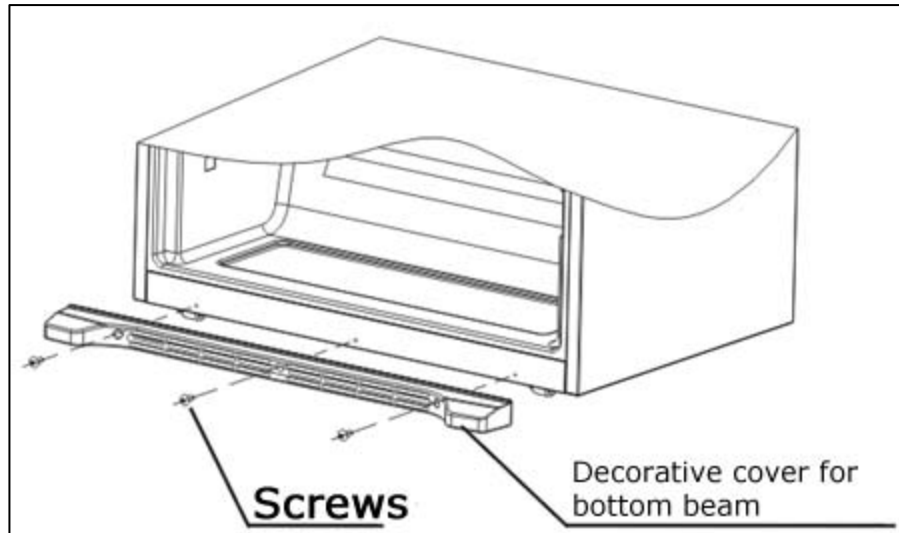
- Using an Allen-key, tighten the door handle side screws (3), in turn securing the handle to the double fixing bolts and the appliance door.
- Ensure that the door handles are secured firmly and are flush to the appliance doors.
- ***IMPORTANT: The door handle side screws should be facing the centre of the appliance, and the drawer side screws should be facing the bottom of the appliance.***



REPEAT THIS PROCESS FOR ALL DOOR/DRAWER HANDLES.

Installing the decorative plinth

- A decorative cover for the base of the appliance can be installed if you wish however it is not essential. The plinth is for decorative purposes only and will not affect the refrigerator's performance.
- The plinth should be installed using the 3 screws as shown in the diagram below:



Troubleshooting



IMPORTANT: If your fridge freezer appears not to be operating properly, before contacting the Baumatic Customer Care Department, please refer to the checklist below.



My fridge freezer does not appear to be working/there is no power to my appliance.

- Check that the plug is fully inserted into the power socket.
- Check that there is power to your mains supply (e.g. that there hasn't been a power cut or that the fuse hasn't blown).
- Check that your mains supply voltage, corresponds to the voltage stated on the rating plate of your appliance.



My fridge freezer appears to be performing poorly.

- Check that the appliance isn't overloaded and that food hasn't been packed too tightly into it.
- Either the fridge or freezer temperature is not set to a low enough temperature. You should set the fridge and/or freezer temperature to a lower temperature.
- Ensure that the doors are closing properly and that the doors have not been opened for a prolonged period in error.
- Ensure that there is adequate ventilation for your appliance.



My fridge freezer is noisy.

- The refrigerant gas that circulates the pipe-work of the appliance may make a slight noise, even if the compressor is not running.
- If the noise worsens or the appliance gets louder than normal; check that it is levelled off correctly, that nothing is touching the rear of the fridge freezer and that nothing placed inside the appliance is rattling.



Ice has formed on the inner back wall of my fridge

- Check that food has not been pushed too far back inside the appliance, so that it is in contact with the inner back wall.
- ***IMPORTANT:*** *It is normal to get some ice droplets forming on the back wall of the appliance. The formation of ice droplets does not indicate an appliance fault.*



The interior light is not working.

- The interior light of the fridge is made up of LED lights and should be long lasting. Please contact the Customer Service Department.



The door is not closing properly

- If the doors have been overloaded or damaged it is possible to adjust the doors. Please see the "Spare Washers" information in the Cleaning and Maintenance section.



IMPORTANT: If your appliance appears not to be operating correctly, then you should disconnect it from your mains supply and then contact Baumatic Customer Care on telephone number (0118) 933 6911.

DO NOT ATTEMPT TO REPAIR THE APPLIANCE YOURSELF.

Please note that if an engineer is asked to attend whilst the product is under guarantee and finds that the problem is not the result of an appliance fault, then you may be liable for the cost of the call out charge.

The appliance must be accessible for the engineer to perform any necessary repair. If your appliance is installed in such a way that an engineer is concerned that damage will be caused to the appliance or your kitchen, then they will not complete a repair.

This includes situations where appliances have been tiled in, sealed in with sealant, have wooden obstructions placed in front of the appliance - like plinths, or any installation other than the one specified by Baumatic Ltd. has been completed.

Please refer to the conditions of guarantee that appear on the warranty card that you receive with the appliance.

IMPORTANT: Baumatic Ltd. operates a policy of continuous improvement and reserves the right to adjust and modify its products without prior notification.

Baumatic consumables

- **BC001** Degreaser for Dishwashers (200g)
- **BC002** Descaler for Washing Machines and Dishwashers (200g)
- **BC003** Ceramic Hob Cleaner (250ml)
- **BC004** Oven Cleaner (250ml)
- **BC005** Stainless Steel Cleaner and Protector (250ml)
- **BC007** E-Cloth – General Purpose Cloth
- **BC008** Microwave Cover

To order a Baumatic consumable product please call 0123 5437 244 and quote the product code. You can also order online from eshop.baumatic.co.uk

Technical Data

Manufacturer	BAUMATIC LTD
Model Number	B40DSS
Product Category	7 – Refrigerator-Freezer
Energy Efficiency Class (1)	A+
Annual Energy Consumption (2)	405 kWh
Storage Volume of Fridge Compartment	422 litres
Storage Volume of Freezer Compartment	120 litres
Star Rating	4
Frost Free Compartments	Fridge and Freezer
Temperature Rise Time	15 hours
Freezing Capacity	10kg/24hr
Climate Class (3)	N, ST
Noise Level	45 dB
Installation Type	Freestanding

(1) On a scale from A+ + + (highest efficiency) to G (lowest efficiency).

(2) Annual energy consumption based on standard test results for 24 hours. The actual energy consumption will depend on how the appliance is used and where it is located.

(3) This appliance is intended to be used at an ambient temperature between "16°C" (lowest temperature) and "38°C" (highest temperature).



United Kingdom

Baumatic Ltd.,
Baumatic Buildings,
6 Bennet Road,
Reading, Berkshire
RG2 0QX
United Kingdom

Sales Telephone

(0118) 933 6900

Sales Fax

(0118) 931 0035

Customer Care Telephone

(0118) 933 6911

Customer Care Fax

(0118) 986 9124

Spares Telephone

(01235) 437244

Advice Line Telephone

(0118) 933 6933

E-mail:

sales@baumatic.co.uk
customercare@baumatic.co.uk
spares@baumatic.co.uk
technical@baumatic.co.uk

Website:

www.baumatic.co.uk

Facebook:

www.facebook.com/baumatic.uk

Republic of Ireland

Service Telephone

1-890 812 724

Spares Telephone

091 756 771

Czech Republic/Slovakia

Baumatic s.r.o.

Lípová 665/1
460 01 Liberec 4
Czech Republic

Panenská 34

811 03 Bratislava - Staré Mesto
Slovakia

+420 483 577 200 (CZ)

+421 255 640 618 (SK)

www.baumatic.cz

www.baumatic.sk

Germany

Kundendienst & Ersatzteile

Deutschland 0049(0)180-5888975

Oesterreich +43 (0) 820 / 420423

www.baumatic.de

Italy

Baumatic Italia S.R.L.

Via Galvani N.3

35011 Campodarsego (PD)

+3904 9920 2297

www.baumatic.it

Holland

Baumatic Benelux B.V.

Dukdalfweg 15d

1332 BH ALMERE

Nederland

+31(0)36 549 1553

www.baumatic.nl







